We the People ...

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THE BLESSINGS OF LIBERTY: COMMEMORATING THE 200th YEAR OF OUR CONSTITUTION



One of the lasting tributes to the Bicentennial was the Living Legacy project, which began in Washington, D.C., on September 17, 1986. To open the year-long anniversary celebration, Director Mott, Lady Bird Johnson, and members of the Bicentennial Commission planted a shadbush tree in Constitution Gardens as a symbol of our living legacy, and they called on citizens to undertake similar projects. The response was enthusiastic. On Constitution Day 1987 hundreds of Living Legacy trees, flowers, and gardens were dedicated in communities across the nation. The shadbush symbol in this annual report highlights some of our special events and programs in 1987.



Printed at no expense to the federal government through the generosity of the Eastern National Park and Monument Association



### HORACE MARDEN ALBRIGHT January 6, 1890 - March 28, 1987

When I first joined the National Park Service, Horace Albright was the director. When I returned to take that same job, I visited Horace on a number of occasions to seek his wise counsel and advice. I was not disappointed.

Horace Albright was a very special man. Even at 97, he was a man who never let time pass him by. His interest and quest for knowledge never stopped. His eloquence and his passion for the National Park Service never dimmed. His typewritten notes, pounded out with one-finger deliberateness, came to me at regular intervals – notes of encouragement, notes of information, notes of support, notes on history and historical events.

We have been specially privileged. We have had the honor of working with one of the rare people who truly changed a nation for all times and influenced international goodwill through parks. Even better, his work created a climate that has fostered many more changes.

Some will say that Horace Albright was the last of his generation, the last of that special breed of men who created the conservation and park movements that spread throughout the world. But it is just as important to understand that he left new generations. Just as his children, grandchildren and great-grandchildren have

built on his personal legacy of public service and private success, the agencies and organizations born of his vision will carry on his mission, in his name and on his behalf, forever.

As great a man as Horace Albright was, our most important memorial to him will be the commitment to carry on his work, his vision, and his dedication long after our little speeches and small gifts are forgotten. It is the most fitting tribute we can offer: our pledge that we will build on the Mather/Albright foundation a stronger National Park Service for future generations to enjoy unimpaired.

William Penn Mott, Jr.

Horace M. Albright has a monument that few will ever match, a magnificent system of national parks that enriches the lives of millions of people and has been emulated by more than 100 nations around the world.

As a co-founder of the National Park Service, Mr. Albright was a pioneer. As the first Park Service superintendent of Yellowstone and the Service's second director, he developed the management concepts and traditions - based on an equal respect for the wonders of nature and the needs of the park visitor - that strongly underpin today's operation of the national park system.

We all are in his debt.

Donald Hodel

The National Park Service, from its beginning, has been an outstanding organization because its leaders, both in Washington and out in the field, worked increasingly and with high public spirit to carry out the noble policies and maintain the lofty ideals of the service as expressed in law and executive pronouncement. Do not let the service become "just another Government bureau"; keep it youthful, vigorous, clean and strong. We are not here to simply protect what we have been given so far; we are here to try to be the future guardians of those areas as well as to sweep our protective arms around the vast lands which may well need us as man and his industrial world expand and encroach on the last bastions of wilderness. Today we are concerned about our natural areas being enjoyed for the people. But we must never forget that all the elements of nature, the rivers, forests, animals and all things coexistent with them must survive as well. . . .

We have been compared to the military forces because of our dedication and esprit de corps. In a sense this is true. We do act as guardians of our country's land. Our National Park Service uniform which we wear with pride does command the respect of our fellow citizens. We have the spirit of fighters, not as a destructive force, but as a power for good. With this spirit each of us is an integral part of the preservation of the magnificent heritage we have been given, so that centuries from now people of our world, or perhaps of other worlds, may see and understand what is unique to our earth, never changing, eternal.

Horace Albright, 1933

I know I'm near the end of the trail, but I'm not unhappy about that, for I've had a wonderful life. The National Park Service has held me captive – and I know it has a great future as well as a great past.

Horace Albright, 1986







Dear Shareholders:

At a time in U.S. history just after the completion of the first transcontinental railroad and just before General Custer's battle at Little Big Horn, Congress acted on one of mankind's nobler ideas by creating the first national park at Yellowstone. In the 115 years since then, this concept of preserving natural, cultural, and scenic treasures through public ownership has evolved into a splendid national park system cherished by every American and envied throughout the world.

Many people are familiar with individual parks -a favorite vacation spot or a place close to home -but few are aware of the incredible diversity of our park system as a whole.

That system now totals 341 units with the addition in 1987 of two new areas: El Malpais National Monument, New Mexico, and Jimmy Carter National Historic Site, Georgia.

Parks in the system now encompass more than 79.6 million acres, an area nearly equal to our fifth largest state, New Mexico. They range in size from Wrangell-St. Elias National Park and Preserve, Alaska, which by itself is bigger than nine of our states, to the Thaddeus

Kosciuszko National Memorial, a tiny house in Philadelphia commemorating a hero of the American Revolution. And they differ in character from the fiery volcanoes in Hawaii to kaleidoscopic coral reefs of the Caribbean to sites occupied by Indians 100 centuries ago.

Visitor facilities developed over the years have added billions of dollars in tangible value to the priceless natural and cultural resources of this national estate. The National Park Service maintains 425 staffed visitor centers, nearly 7,000 wayside exhibits, almost 8,000 miles of scenic roads with 1,300 bridges and tunnels, more than 4,300 water and sanitary systems, and hundreds of campgrounds. Park concessioners offer some 10,000 rooms in hotels and lodges.

Our mission to manage parks in such a way that they can be enjoyed by today's generation – while preserving them for the next – has become more complicated since Yellowstone was fashioned out of the country's frontier.

Last year we took a major step toward safeguarding our parks into the 21st century by producing, for the first time, comprehensive assessments of their natural and cultural resources. This systematic examination of park resources was the first and foremost goal of my 12-Point Plan and will enable us to develop a long-range professional strategy for resource management.

Another significant accomplishment in 1987 was the expansion of the recreation fee program. Last year, 179 parks collected \$41.9 million in entrance and other user fees. Our success prompted Congress to authorize a permanent fee program that will become an increasingly important source of revenue for resource protection and management.

America loves its national parks. Park attendance in 1987 once again set an all-time record with 287 million recreation visits. And a November 1987 survey by the Roper Organization, Inc., on public attitudes toward government agencies gave the National Park Service an 80 percent favorable rating – the highest of any federal department or bureau.

We're deeply grateful for this public support. And as you read through our 1987 annual report, I hope you will sense the importance of our national park system to our lives as individuals and to the nation. Parks are a measure of our wealth as well as our character, our past as well as our future. All of us play a vital role in making certain this national estate is intact and unblemished when we pass it on to our heirs.



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# VISITOR USE

### Interpretation

Interpretive programs open the doors to national parks for visitors. In 1987 interpretive presentations, walks, and talks reached nearly 150 million people, broadening their knowledge and appreciation of park resources and special features. As in the past many of these services were made possible through the efforts and generosity of the volunteers-in-parks, friends of the parks groups, cooperating associations, concessioners, private and corporate contributors, and other supporters. Volunteers-in-parks alone contributed more than 1,000 work-years worth \$17 million.

Innovation in interpretive services is a continuing goal – whether in seeking exciting ways to describe the history and natural history of park areas or providing programs and improvements to make park features accessible to more visitors. In 1987 many new programs were introduced in the parks. At Alcatraz Island in Golden Gate National Recreation Area, for example, an audio cassette tour of the cellhouse was initiated that features the actual voices and reminiscences of former inmates and correctional officers. This enormously popular tour and other interpretive innovations were developed through the cooperative efforts of the Park Service, the Golden Gate National Park Association,

and a concessioner. A program started at Anacapa Island in Channel Islands National Park last year permits visitors to follow a scuba diver via video camera and ask questions about his surroundings. The technique involves one diver filming another. The diver with the camera is connected to a video monitor on the dock where visitors can view the video as it is being filmed and can address questions to the diver-naturalist examining features of the kelp forest and ocean floor. The interpretive equipment was purchased with a donation to the Friends of Channel Islands.

Other unusual programs and exhibits included the "Owl Prowls" at Congaree Swamp National Monument, where interpreters introduced visitors to the sights and sounds of forest creatures on night walks, and the "Conversations with Artists" series at Saint Gaudens National Historic Site. Staff at Andersonville National Historic Site fulfilled a long-standing congressional mandate last year by adapting a building into a museum that interprets the prisoner of war story in history. At Glacier Bay National Park and Preserve the art of canoe building was graphically interpreted when three skilled carvers, under the direction of a 90-year-old tribal elder, sculpted a traditional Tlingit sea otter canoe out of a spruce log. This project was supported by private donations and the native community, and the large seagoing canoe is now on display in the park.



Canoe Carving – Glacier Bay

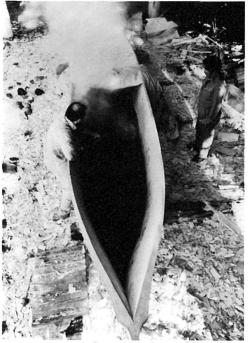
ANDREW JOHNSON ANIAKCHAK ANTIETAM APOSTLE ISLANDS APPALACHIAN APPOMATTOX COURT HOUSE ARCHES ARKANSAS POST ARLINGTON HOUSE ASSATEAGUE ISLAND

Many popular programs were expanded in 1987. A new Junior Ranger program was started at Andrew Johnson National Historic Site, in which children who complete a workbook and pick up a bag of litter are sworn in as Junior Rangers and awarded a badge and certificate. A new program at Indiana Dunes National Lakeshore aided in establishing a strong bond between the community and the Douglas Center for Environmental Education, and the Junior Rangers played a significant role in cleaning up the Miller Woods environmental study area. The Junior Ranger program at Zion National Park grew to include more than 2,500 youngsters last year.

Projects to make interpretive attractions accessible to disabled visitors were also widespread. At Carlsbad Caverns National Park, for example, new backlighted exhibits were installed to explain the cavern story to deaf and hearing-impaired visitors who cannot use radio receivers. At Fort Raleigh National Historic Site a new exhibit for people with visual handicaps was installed at the visitor center. The project, called VISYT or Visually Impaired See Yesterday Today, combines hands-on exhibit features and special visual and hearing devices; it was cosponsored by the National Park Service, Eastern National Park and Monument Association, and the Manteo Lions Club.

A wide range of exhibits, films, videotapes, and publications entertained and enlightened visitors last year, and the Park Service continued to design and develop new media for use in interpretation. More than 250 park folders were produced or revised, and 23 million were distributed in the parks; 48 new wayside exhibits and 17 visitor center exhibits were installed; 19 new audiovisual programs were completed; and 15 historic buildings were furnished.

The Bicentennial of the United States Constitution was celebrated in parks throughout the country in 1987. Major events and activities are highlighted in the Bicentennial feature.



Canoe Carving – Glacier Bay



VISYT Exhibit - Fort Raleigh

AZTEC RUINS BADLANDS BANDELIER BENJAMIN FRANKLIN BENT'S OLD FORT BERING LAND BRIDGE BIG BEND BIG CYPRESS BIG HOLE BIGHORN CANYON BIG SOUTH FORK



Carol Spear's Interpretive Program - Cuyahoga



Climbing Skills Demonstration - JNEM



1987 Freeman Tilden Award Winner

Each year the National Parks and Conservation Association presents the Freeman Tilden NPCA Interpreter of the Year Award for outstanding contribution to interpretation by a National Park Service employee. In 1987 park ranger Carol J. Spears from Cuyahoga Valley National Recreation Area was the winner. Carol was recognized for her pioneering work in natural resource interpretation. She created a program series called "Preserving Nature in the Cuyahoga Valley NRA", to focus public awareness on resource management problems, practices, and policies and to increase public stewardship of our important natural resources. Congratulations, Carol.

Union Station Project

A three-month trial project at the historic Union Station in Jefferson National Expansion Memorial last year confirmed the potential for providing a large metropolitan audience with information about the entire national park system. Some of the finest interpreters in the National Park Service presented programs there between June and September, and their endless enthusiasm and diverse styles, methods, and experiences were key ingredients in the project's success. Programs varied from a living history presentation relating the viewpoints of two Civil War soldiers from opposing sides to a formal interpretive program about national park system areas in the West. Park rangers from Carlsbad Caverns National Park drew large crowds when they demonstrated the climbing skills used in their park - a lead-in to their talk on groundwater quality and other resource management concerns in cave areas. The Union Station project successfully met the 12-Point Plan objectives of expanding interpretive activities for greater public impact and increasing public understanding of the National Park Service, and the participants made more than 9,000 important contacts. We look forward to similar future endeavors.

BIG THICKET BISCAYNE BLACK CANYON OF THE GUNNISON BLACKSTONE RIVER VALLEY BLUE RIDGE BOOKER T. WASHINGTON BOSTON AFRICAN AMERICAN BOSTON

### Information

To increase public awareness of national parks and to make travel to them more convenient and enjoyable, we continued to expand informational services within and near the parks. For example, Sleeping Bear Dunes National Lakeshore, under an agreement with the Michigan Department of Transportation, installed a series of large, all-weather color photographs at an interstate highway rest area. These exhibits show the locations and features of the three NPS areas in Michigan — Sleeping Bear Dunes and Pictured Rocks national lakeshores and Isle Royale National Park. Planning is underway to put similar exhibits at four or five state welcome centers.

Informative publications and handouts are an important part of our visitor services, and many new publications were provided last year. At Wolf Trap Farm Park the Parks and History Association published one brochure detailing the park's many programs and another for the new self-guiding tour. These publications gave the park a new dimension for visitors of all ages. At George Rogers Clark National Historical Park a very popular multilingual information handout was produced that presents the park story in French, Spanish, German, and English.

More and more often we are using radio and television to get information to visitors. Traveler information services were instituted at Grant-Kohrs Ranch National Historic Site and Oregon Caves National Monument last year to provide radio information to motorists on nearby highways about activities and services in the parks. Information services for boaters were established at Apostle Islands National Lakeshore using prerecorded messages transmitted from three locations. Yellowstone National Park established an information television channel to operate on the Mammoth cable system. The channel gives current weather readings, road reports, upcoming activities, and other information of interest to visitors.



Eskimo Stone Markers – Bering Land Bridge

Strategically placed contact facilities can greatly increase NPS visibility and informational services to the public. In northwest Alaska last year the Kotzebue visitor information center was opened year-round and a new slide/video program was produced about the parks in the region – Bering Land Bridge and Noatak national preserves, Cape Krusenstern National Monument, and Kobuk Valley National Park. These actions opened new opportunities to share information about the parks with visitors and the residents of Kotzebue and the region.

Outreach programs continue to be a valuable means for increasing people's awareness of the parks. In 1987 approximately 1½ million contacts were made through outreach services such as school and community programs. An unusual outreach project took place at Theodore Roosevelt Birthplace National Historic Site. Capitalizing on the fact that the teddy bear was named for the 26th president, the park launched a citywide campaign in early fall to acquire a teddy bear for each hospitalized child in New York City during Christmas and Hanukkah. The campaign drew such response and volunteer support across the city, including the Theodore Roosevelt Association, New York Patrolmen's Benevolent Association, schools, and businesses, that the park was able to expand its distribution to hospitals and institutions in three surrounding counties.



Arts for the Parks Competition

A major highlight of 1987 was the first annual Arts for the Parks competition. Supported by the National Park Foundation and the National Park Academy of the Arts, it was one of those special events that benefitted the artist, the art lover, and the national parks. A portion of the entry fee for each painting submitted went to the National Park Foundation to support national park projects; the remainder was set aside as seed money for the 1988 competition. An impressive group of individuals judged the submissions. They chose 33 paintings from each of three regions, reviewed this selection, and finally chose three regional winners and one first-place winner. The regional winners were Lee Stroncek's "Cloud Drift, Logan Pass" in Glacier National Park, Peter Nisbet's "Morning Light, Canon del Muerto" in Cañyon de Chelly National Monument, and Steve Lesnick's "Lincoln Memorial." The grand-prize was awarded to Richard Schmid for his entry, "Mountain Stream," a locale in Rocky Mountain National Park. The winners were announced at an awards banquet at Jackson Lake Lodge near Grand Teton National Park in September - beginning what we hope will be a continuing artistic appreciation of parks worldwide.



Tourism and Parks Conference

Although some national park areas are crowded on holiday weekends during the peak season, there are dozens of areas where park managers would welcome additional visitors anytime. To provide marketing help to parks in the central U.S., particularly the less visited areas, Herbert Hoover National Historic Site cohosted a conference in 1987 called "Tourism and Parks." Park managers, state tourism coordinators, and tourism business people gathered in Des Moines, Iowa, in April to share ideas, offer skills training, and develop cooperative marketing projects that will stimulate park visits and result in more parks becoming travel destinations. The conference, which was produced at no cost to the Park Service, was considered extremely valuable by all participants. The Park Service has planned a national "Tourism and Parks" conference for 1988.

Golden Eagle Pass

The Golden Eagle Pass was redesigned last year. This attractive new pass, which admits the cardholder and family members into any of the National Park Service's fee-charging units for a full year, is an excellent bargain for people who wish to visit several park areas where the entrance fees exceed the annual \$25 cost. The money collected from the annual pass provides for resource protection, research, and interpretation in all of the national park system areas.

CAPE LOOKOUT CAPITOL REEF CAPULIN MOUNTAIN CARL SANDBURG HOME CARLSBAD CAVERNS CASA GRANDE CASTILLO DE SAN MARCOS CASTLE CLINTON CATOCTIN MOUNTAIN

### **Operations and Maintenance**

Along with the more conspicuous programs and services, park employees carry out numerous behind-the-scenes functions that make park visits safer and more enjoyable – maintenance and cleanup, patrol and supervision, critical aid in emergencies, access and traffic management and improvement. These and other day-to-day services contribute to the attraction of national parks and are one of the important reasons that a 1987 Roper poll found the Park Service the most popular federal agency in the country.

Once again, maintenance projects were a major part of the budget expenditures, providing critical upkeep and improvements in the parks. For example, Washington, D.C.'s most popular bicycle trail in Rock Creek Park got a sprucing up when 2.4 miles of trail were repaired and rehabilitated for the thousands of bikers and joggers who use this trail yearly. Many maintenance projects were made possible through the efforts of the Student Conservation Association, Youth Conservation



YCC Workers - Custer Battlefield

Corps, Boy Scouts, Girl Scouts, and other cooperative work programs and support groups. At Curecanti National Recreation Area SCA members reconstructed the Hermit's Creek trail and campground. At Custer Battlefield National Monument YCC workers helped upgrade a 50-year-old street in the national cemetery. YCC enrollees at Knife River Indian Villages National Historic Site spent six weeks removing brush to open up a major archeological ruin to visitors.



Boy Scouts at Work

The spirit instilled by the "Take Pride in America" campaign was evident in both the attitudes of visitors and their contribution to park maintenance and cleanup efforts. The 1987 Independence Day celebration on the Washington Monument grounds was a significant example. The more than half a million people who enjoyed the day's festivities under Take Pride banners left less than a sixth as much refuse as in previous years. The successes of the Take Pride campaign are described throughout this report and highlighted in the Take Pride feature.

The Park Service has undertaken an anti-litter campaign in support of Take Pride goals. A series of animated television public service announcements were introduced last year that featured cartoonlike "litter critter" characters, each with a message encouraging the public not to litter our parks. These announcements were sent to 340 television stations nationwide in the spring of 1987 and have been widely aired. Since the inception of the coordinated antilitter program in 1986, when the annual costs for litter cleanup were in excess of \$15,000,000, this educational effort has contributed to a significant reduction in cleanup costs and related maintenance requirements.

Many cooperative efforts in the area of emergency services were initiated or extended in 1987. Volunteers from local counties near Big South Fork National River and Recreation Area formed an interagency technical rescue team for both mountain and river rescue operations. The team, which regularly patrols the most dangerous stretches of white water, contributed nearly 450 hours of volunteer time last year. At Lake Meredith Recreation Area, staff finalized a mutual aid agreement with the nearby city of Fritch Fire Department whereby either entity will respond to wildland or structural fires at the request of the other. This agreement relieves the Park Service of the need to have both structural and wildland fire trucks and greatly increases the number of personnel available to combat both types of fires. At Great Smoky Mountains National Park a highly successful park medic program was developed in cooperation with the University of Tennessee Hospital. The park now has seven medics available for emergencies, and



Technical Rescue Team – Big South Fork

the program has been expanded to include additional hospitals on both the Tennessee and North Carolina sides of the park.

The quality of park visits can be greatly enhanced by seemingly small improvements to ease access and circulation, reduce congestion, and make special features available to more visitors. An example from 1987 is the Statue of Liberty. The newly restored and reopened statue, which is designed to handle just over 2 million visitors a year, accommodated more than 3 million people last year because of effective orientation and crowd control procedures. In addition, visits were made safer and more enjoyable because of improvements to the fire alarm and air-conditioning systems and the elevators. At Denali National Park and Preserve traffic patterns improved when guests at three campgrounds were asked to ride to their campsites in buses rather than private vehicles. As a result of this management step, traffic on the park road decreased by 4 percent while visitation increased by 9.8 percent.



Grand Canyon

A major step was taken in late 1987 to reduce the effects of aircraft overflights on park use when a precedent-setting proposal was put forward to establish four flight-free zones at Grand Canyon National Park. The proposal was developed after consultations with air tour operators and environmental interests and was prepared in response to a new law enacted by Congress last summer calling for better control of flight operations over the park to ensure visitor safety and protect the natural quiet of the canyon. In a letter to the Federal Aviation Administration, Assistant Secretary of the Interior William Horn said the proposal for flight-free zones above backcountry areas would restore conditions of natural quiet for more than 90 percent of backcountry users. Recommended flight corridors would continue to provide scenic opportunities for air tour passengers.



Fee Program

In late 1986 Public Law 99-591 gave the Park Service temporary one-vear authority to increase entrance fees at collecting parks and to institute new entrance fees at selected parks. Last year 71 parks were added, increasing the total number of entrance fee areas to 132. Of the total of \$41.9 million in recreation fees collected, nearly \$27 million were entrance fees as compared with \$10 million in 1986. The 1987 program was successful because of the efforts of park managers and staffs at all levels and the promotion of the fee program through the news media. For the most part visitor responses were positive, and objections to the fee program were generally dispelled when visitors were informed that the fees would be returned to the park for resource management and visitor use purposes. Congress has now extended the authority to collect fees, and in 1988 the Park Service intends to add 17 more parks to the entrance fee program. The funds collected will continue to be used for park interpretation, research, protection of resources, and maintenance activities related to the protection of resources.

Friends meeting

To expand the role of citizens in advancing the mission of national parks — one of the major initiatives of Director Mott's 12-Point Plan — the National Park Service and the National Parks and Conservation Association held a nationwide conference, "That's What Friends Are For," to help park personnel and friends organize and energize support groups. Some 150 participants including park superintendents and employees, members of friends groups, and other private citizens met in Leesburg, Virginia, in July to exchange ideas, problem-solve, and develop new strategies. Some of the topics tackled were marketing, private sector initiatives, leadership, and managing with humor. Each participant agreed to implement one new initiative within the next year. During the conference Director Mott presented awards recognizing the contributions of 30 private citizens.



National Park Service sponsorship of Boy Scout activities is a longstanding tradition, and Scouting units throughout the country have contributed immeasurably to the preservation and maintenance of park resources. Last year was no exception. Across the nation hundreds of projects involving thousands of Scouts were completed in national park system areas - many as part of the Take Pride in America campaign. For example, Pipestone National Monument hosted 102 Boy Scouts in an autumn Take Pride in America/Boy Scouts of America camporee during which the Scouts relaid native prairie sod on newly constructed water and sewer line in the park. Boy Scouts were responsible for many major cleanup projects in park areas. One, initiated at C&O Canal National Historical Park in 1986, received a national Take Pride in America award last summer. Other less traditional projects completed in 1987 included conducting a deer census at Scotts Bluff National Monument, placing 6,000 U.S. flags on graves at Poplar Grove National Cemetery, and assisting on a fish habitat improvement project at Bighorn Canyon National Recreation Area.

A few statistics from last year may begin to explain the value of Boy Scout contributions to the national park system. In the Southeast

Region alone more than 1,500 Scouts completed 61 projects ranging from trash cleanup to painting picnic tables and trail signs. At Fredericksburg and Spotsylvania National Military Park 76 Scouts contributed 1,010 hours worth \$12,000. At Santa Monica Mountains National Recreation Area 350 Scouts volunteered 3,520 hours on 11 different projects.

The Park Service continued to expand its support of Scouting programs. A manual entitled "Take Pride in America - Catch the Scouting Spirit" that describes how NPS Scouting programs can be of mutual benefit to the Park Service and Scouts was developed by the Southwest Region scouting coordinator and is now being revised for use by other agencies. A Take Pride in America patch designed by the same region to recognize Scouting contributions was endorsed by the Boy Scouts organization. Park Service employees continued to serve Scouting programs in their local areas and contributed thousands of hours to manage Scouting projects in the parks. Dozens of park system areas provided space and assistance in conducting camporees, historees, and other events. A national NPS/BSA workshop is being planned for 1988 to define goals and objectives and to draft a plan for future Scouting activities in national parks.



Boy Scout Project, Footbridge over Civil War Trenches – Fredericksburg-Spotsylvania

DELAWARE DELAWARE WATER GAP DENALI DE SOTO DEVILS POSTPILE DEVILS TOWER DINOSAUR EBEY'S LANDING EDGAR ALLEN POE EDISON EFFIGY MOUNDS EISENHOWER

### **Design and Construction**

In keeping with the philosophy that well-designed park facilities are an essential part of a park visit, we initiated or continued a number of major design and construction projects. To meet the 12-Point Plan goal of moving out of critical resource areas, we continued the project to relocate facilities out of Yosemite Valley in Yosemite National Park. Construction began at the El Portal housing area, and designs for other parts of the housing area, the maintenance facility, and utilities were developed. An abandoned sewage treatment plant was removed from the valley and the area restored to natural conditions. The relocation of concession facilities from Giant Forest to Clover Creek in Sequoia-Kings Canyon National Park also progressed, including construction of the maintenance facility, infrastructure, and sewage treatment plant and design of the housing, fire station, and public showers.

Many new visitor facilities were completed and opened to the public. The Jaggar Museum at Hawaii Volcanoes National Park, dedicated in January, received more than a million visitors in its first 11 months of operation. Twelve-vear-old Vovageurs National Park came of age in August with the completion and dedication of its first major visitor facility - the Rainy Lake visitor center. Overlooking Black Bay and the Kabetogama Peninsula, the 6,000-square-foot center is a state-ofthe-art complex constructed of western red cedar, red oak, and granite that blends with its north woods environment. An attractive new visitor center was also opened at Obed Wild and Scenic River after the park staff leased a former bank building and converted it into a visitor facility and offices. The popular Shark Valley area in Everglades National Park was reopened after 18 months of renovation. The construction program included a new visitor center and tram boarding area - designed to look like the traditional Miccosukee Indian dwellings called "chickees" - and a new 15-mile loop road. Visitors can hike, bike, or ride the concession-operated tram through the sawgrass marsh to an observation tower offering a panoramic view of the Everglades. The new roadway has been redesigned and elevated to allow year-round use and restore a more natural waterflow in the area.



Rainy Lake Visitor Center - Voyageurs



"Chickee" Visitor Center Complex - Everglades

Through the aid of various support groups, hundreds of smaller construction projects were also accomplished. The Friends of Fort Union Trading Post National Historic Site donated labor and materials for construction of a new entrance road, parking areas, and trail. Through the Boy Scout project Save Our American Resources, the main trail at Gila Cliff Dwellings National Monument was upgraded to improve safety and convenience; the volunteers also constructed an amphitheater and rebuilt a fence. The value returned to the Park Service was 11 times the cost of the project. Concessioners contributed to the success of design and construction throughout the park system. At Big Bend National Park, the concessioner began work on the addition of 38 long-needed motel rooms. At Yellowstone National Park renovation of the historic public use areas at Lake Hotel was completed.



Artist's Sketch – Cumberland Gap Tunnel Project

Renovations were made in many parks to make facilities and attractions handicap accessible. At Cedar Breaks National Monument the picnic and campground areas were redesigned and rehabilitated to improve access by disabled visitors. At Fort Smith National Historic Site the visitor center entrance was outfitted with a lift for visitors in wheelchairs. At Pea Ridge National Military Park the east overlook trail was rehabilitated to make it accessible by removing the crown, widening the trail, and reducing the grade. The overlook provides a panoramic view of the battlefield.

Road construction and improvement projects were a major part of our 1987 accomplishments. Work continued on the Cumberland Gap tunnel project. A pilot bore and railroad bridge were completed, and construction on five bridges and their associated approach roads continued. This multimillion dollar project is scheduled for completion in 1994. A new entrance road into the headquarters of Chattahoochee River National Recreation Area opened in October, completing a seven-year effort to divert park traffic out of a residential area. The new road provides visitor access to one of the most scenic stretches of the river. An additional 11 miles of the Natchez Trace Parkway were completed, including the beautiful Water Valley overlook. After 50 years of almost continuous construction, only 35 miles of parkway remain to be funded by Congress. When completed, the parkway will extend 445 miles from Nashville, Tennessee, through Alabama, to Natchez, Mississippi.

FORT BOWIE FORT CAROLINE FORT CLATSOP FORT DAVIS FORT DONELSON FORT FREDERICA FORT JEFFERSON FORT LARAMIE FORT LARNED FORT MCHENRY FORT MATANZAS



Design Competition

Last year the National Park Service and National Endowment for the Arts cosponsored the first open federal design competition since the 1920s. The challenge was to preserve the extant half of the historic Wesleyan Chapel where the first women's rights convention was held in 1848 and to develop an adjacent plaza, parking lot, visitor center, and administrative offices. The winning design, by Ann Marshall and Ray Kinoshita, will preserve the chapel and create a monument to the 1848 convention within a walled sanctuary. The Declaration of Sentiments, the document signed by the convention members supporting women's rights, will be displayed.



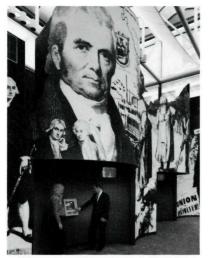
Winning Design - Women's Rights

Blue Ridge Parkway

After more than five decades of stop-and-go construction, the Blue Ridge Parkway was completed in 1987, and all 470 miles between Shenandoah and Great Smoky Mountains national parks became available to visitors. Secretary of Transportation Elizabeth Dole and Director Mott were among the many dignitaries who joined in the dedication ceremonies held on September 11, the 52nd anniversary of the beginning of construction. The dedication took place at Grandfather Mountain in North Carolina, where the final 7.5-mile section of road was completed. A ribbon-cutting at the award-winning Linn Cove Viaduct signaled the opening, and visitors quickly began to explore the new stretch. Some 125,000 vehicles crossed the viaduct during the first month. A highlight of dedication day was a 65-vehicle motorcade, with at least one car or truck representing each year of parkway construction. Among the other crowd pleasers were mountain music performances and demonstrations of traditional arts and crafts.



Motorcade at Blue Ridge Parkway Opening



"Promise of Permanency" Exhibit

# 1987 - Bicentennial of the Constitution

All eyes were on Philadelphia last year as we celebrated the 200th anniversary of the United States Constitution. The National Park Service, cooperating with Philadelphia's We The People 200 Committee, planned and coordinated the celebration, most of which took place in Independence National Historical Park. During the year-long remembrance, every state, over a hundred countries, and thousands of volunteers produced more than 300 exhibits, programs, and activities for the celebration.

Independence featured three special exhibitions: "Magna Carta," "Miracle at Philadelphia," and "Promise of Permanency." The Magna Carta is the 13th century English document that for the first time said that no man, not even a king, is above the law. The exhibit was presented in Old City Hall, where the Supreme Court heard its first case, and was funded by the local Magna Carta Foundation. "Miracle at Philadelphia" told the story of the drafting of the Constitution. It was presented in the Second Bank of the United States and featured many original documents including four working drafts of the Constitution and the notes James Madison kept during the closed-door meetings. Funds for the exhibit were provided through the Friends of Independence NHP. "Promise of Permanency" was an interactive computer exhibit that allowed visitors to explore how the Constitution relates to them. It was created for the park visitor center through a grant from Bell of Pennsylvania. Over a million visitors used this exhibit during the first eight months of its projected five-year life.

The focus of the Bicentennial celebration was May 25 through September 17, the period that the Constitutional Convention met in 1787. We The People 200 constructed a large pavilion on Independence Mall to serve as the setting for numerous events. Daily activities and special features such as the soapbox, where visitors could make speeches on any subject, a marching fife and drum corps, and the musical drama "Four Little Pages" produced especially for the celebration, added to the variety of attractions.



"Miracle at Philadelphia" Exhibit

FORT WASHINGTON FOSSIL BUTTE FREDERICK DOUGLASS HOME FREDERICK LAW OLMSTED FREDERICKSBURG & SPOTSYLVANIA COUNTY BATTLEFIELDS FRIENDSHIP HILL

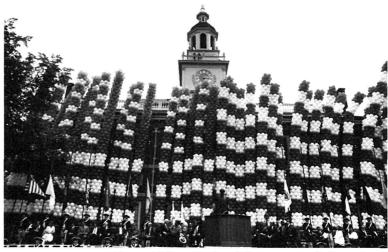
Special events began on Memorial Day weekend with "All Roads Lead to Philadelphia," a four-day celebration of the opening of the convention. The weekend included an opening ceremony with former Chief Justice Warren Burger and Vice President George Bush, a 1787 festival illustrating life 200 years ago, a conference of governors from the first 13 states, and a governors' ball. July the 4th was a three-day spectacular with parades, concerts, fireworks, and a "Spirit of America" pageant by the U.S. Army. On July 16th, 225 members of Congress gathered to pay their respects to the Constitution. They participated in a public ceremony in front of Independence Hall and then convened in Congress Hall where the first five Congresses met 1790-1800.

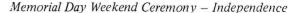
Parks throughout the country remembered the historic events in a variety of ways. At Fort Smith National Historic Site a commemorative tree was planted as part of the Living Legacy project, and a "reratification reunion" provided citizens the opportunity to relive the founding of the U.S. government by adding their names to a parchment copy of the Constitution. Boston National Historical Park developed a very popular living history program in which Federalists and Anti-Federalists debated Constitutional issues. The July the 4th Veiled Prophet Fair at Jefferson National Expansion Memorial was given the theme "We, The People," and a special Constitutional Village was established on the fairgrounds. Mount Rushmore National Memorial developed and presented a one-act play, "Ben Franklin and the Constitution." At the Bicentennial celebration in Santa Monica Mountains National Recreation Area, 100 people were naturalized as U.S. citizens.

The celebration culminated September 17, the 200th anniversary of the signing of the Constitution. President Reagan joined millions of Americans in Philadelphia and on national television to view the "Grand Federal Procession." Warren Burger joined in a 4 pm bell ringing ceremony at Independence Hall, and a two-hour television special from the Philadelphia Civic Center was held that night. The day concluded with fireworks and the lighting of the Benjamin Franklin Bridge.



"Promise of Permanency" Exhibit







Former Chief Justice Burger and Friend at "Miracle at Philadelphia" Exhibit Opening

GATES OF THE ARCTIC GATEWAY GENERAL GRANT GEORGE ROGERS CLARK GEORGE WASHINGTON BIRTHPLACE GEORGE WASHINGTON CARVER GEORGE WASHINGTON GETTYSBURG



Spring\_

At a March celebration at Herbert Hoover National Historic Site, 3,000 Girl Scouts gathered to honor former Girl Scout President Lou Henry Hoover on the 75th anniversary of the organization. A Lou Henry Hoover patch designed jointly by the Park Service and the Girl Scouts was unveiled during the ceremonies.

Also in March the Virgin Islands Biosphere Reserve Center was dedicated on St. John, Virgin Islands National Park. This four-building complex will serve as a center for research, training, education, and cooperative activities for the only biosphere reserve in the Lesser Antilles.

The king and queen of Spain visited El Morro at San Juan National Historic Site in late May. A welcoming ceremony and a guided tour by park staff were broadcast live on local television stations.



King Juan Carlos I at El Morro



Girl Scout /5th Anniversary Herbert Hoover

Summer

A congressional resolution designated July 2-3, 1987, as the United States-Canada Days of Peace and Friendship, and a two-day gathering at Glacier National Park recognized the event. Director Mott and his counterpart Assistant Deputy Minister, Environment Canada, James Collinson were joined by a large group of park managers and professionals who formally agreed to work toward realizing the full potential of the Waterton-Glacier International Peace Park. The closing ceremony was highlighted by the smoking of a peace pipe.

On July 3rd President and Mrs. Reagan and many cabinet members celebrated a "Star Spangled Day" at the Jefferson Memorial. The next day half a million people gathered on the Washington Monument grounds to observe our nation's independence day with music, speeches, and fireworks.

On July 13 a large crowd gathered on the grounds of George Rogers Clark National Historical Park to celebrate the Bicentennial of the Northwest Ordinance and to recognize the role of George Rogers Clark in the early history of the Northwest Territory. The program featured addresses by Indiana Governor Robert Orr and U.S. Senator Dan Quayle, and special messages were sent from President Reagan and former Chief Justice Burger. President Reagan's message pointed out the significance of the Northwest Ordinance, "considered one of the foundation documents of our nation because it became a model for the Constitution and the Bill of Rights and because of its significance for the expansion of the Union."

America's finest traditional musicians and dancers gathered at Lowell National Historical Park July 23-25 for the 49th National Folk Festival. More than 100,000 people from all over New England attended the highly successful event, which Lowell's city manager described as a "coming-out party for the city."

GILA CLIFF DWELLINGS GLACIER BAY GLACIER GLEN CANYON GLORIA DEI (OLD SWEDES') CHURCH GOLDEN GATE GOLDEN SPIKE GRAND CANYON GRAND PORTAGE GRAND TETON



# Fall

On August 14 managers and supporters of the Appalachian National Scenic Trail celebrated the 50th anniversary of its completion as a continuous marked footpath from Maine to Georgia. On the same day in 1937 a small CCC crew finished a 2-mile section between Spaulding and Sugarloaf Mountains in Maine, and the volunteers who had worked on the trail for 16 years declared it open. As part of last year's many celebrations the surviving members of the 1937 CCC crew placed a memorial plaque in a rock along that final section of trail.

As part of the Take Pride in America/Public Lands Day in September Ocmulgee National Monument, working with local sponsors, held a weekend celebration that included a park cleanup campaign and featured wildlife displays, workshops, and speeches by local dignitaries. Ocmulgee was chosen as one of five finalists in the national Take Pride awards competition.

The Duneland Harvest Festival in late September drew a record crowd of 15,000 people. This year's event, which was sponsored by the Friends of Indiana Dunes National Lakeshore, included new festival sites, tours of a farmhouse in the process of being restored, and a scarecrow contest. Winter

At Golden Gate National Recreation Area in December the squarerigged sailing ship *Balclutha* crossed San Francisco Bay following a spruce-up for her 100th birthday party. After a one-hour voyage, two tugs brought her back to her berth at Fisherman's Wharf.

Christmas celebrations were held at parks throughout the country. Adams National Historic Site participated in "Holidays in Quincy," opening the old house to the public for a four-day celebration. During the annual Frontier Christmas candlelight tour at Fort Scott National Historic Site visitors had the opportunity to observe traditional holiday festivities in 1845.

Christmastime in our nation's capital was eventful. The lighting of the National Christmas Tree came early, in recognition of the official state visit of General Secretary Mikhail Gorbachev of the Soviet Union. On December 7th, the day of the general secretary's arrival, the lights were lit in a symbol of international goodwill. Park Service staff provided services from escorts to crowd supervision activities during the historic summit conference. The Ellipse south of the White House was the focal point for national and international media coverage and nightly network broadcasts.



Duneland Harvest Festival – Indiana Dunes



Duneland Harvest Festival – Indiana Dunes



National Christmas Tree



## **RESOURCE MANAGEMENT**

### Natural Resources

Through research, monitoring, and active reclamation and recovery projects, we continue to ensure that our most precious natural resources are preserved into the future. Following are some of the activities that took place in 1987.

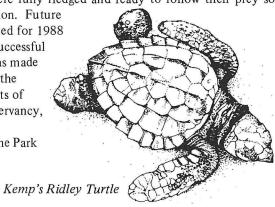
Animal Recovery. Restoring native species that have been lost from park areas and maintaining healthy populations of other species is an ongoing activity of park management, and identification and protection of endangered or threatened species are special concerns. Many parks took steps last year to assist threatened species or restore native species.

The swift fox is listed as threatened in South Dakota and has been proposed for listing under the federal Endangered Species Act. In June 1987 a family of swift foxes was captured on the Pine Ridge Reservation, where prairie dog poisoning has raised concern for the fox's survival, and was transplanted in Badlands National Park. Further transplants are planned. It is hoped that such measures will allow the species to become firmly reestablished in the park, where large prairie dog towns can supply food.

Three important recovery projects in the southern states involve the Kemp's Ridley sea turtle, the Florida panther, and the bald eagle. For 10 years, eggs of the sea turtles have been incubated and imprinted at Padre Island National Seashore in an attempt to develop a breeding colony there. It is nearing time for the Padre Island hatchlings to reach breeding age, and beach patrols hope soon to discover nests. As part of Florida panther recovery efforts at Everglades National Park six panthers have been radio-collared to track their movements. Knowledge of panther home range and use of habitat will help protect the very small population remaining in southern Florida. The second year of a program to reintroduce bald eagles at Gulf Islands National Seashore has resulted in the fledging of four more birds at Horn Island – bringing the total to eight birds released in the wild. The U.S. Air Force supplied a surplus tower and delivered it to provide a roost for the young eagles. Because of its success, the program is being expanded.

Programs to reintroduce the endangered peregrine falcon continued to have positive results in 1987. A new program at Isle Royale National Park saw the first successful reintroduction of peregrines on NPS lands in the Midwest. Five peregrine chicks were purchased, banded, colormarked, and kept in a hack box at the fledge site until July, when they were released to test their wings. By mid-September all five of the young falcons were fully fledged and ready to follow their prey south

in the fall migration. Future releases are planned for 1988 and 1989. The successful 1987 program was made possible through the cooperative efforts of The Nature Conservancy, the University of Minnesota, and the Park Service.



Vegetation Restoration. Natural recovery is not always possible in previously disturbed park areas, and active techniques are required to aid vegetation and habitat restoration - plantings, structural techniques, prescribed burns. For example, the old Paradise campground area at Mount Rainier National Park has not been used since the early 1970s; however, because of harsh environmental conditions and its location above 5,000 feet, very little resource recovery has taken place. Last year, with the aid of recreation fee monies, the park was able to assign a crew to complete restoration work that will speed up the natural recovery process. At Arches and Canyonlands national parks resource management personnel developed a draft plan for reclaiming sites disturbed by mining activities before the parks were established. Recovery is also very slow in these areas because of shallow soils, few nutrients, and an extremely dry climate. Proposals for reclaiming the disturbed sites include recontouring, soil treatment and stabilization, seed and seedling recommendations, and water needs. Although the reclamation proposals focus on vegetation rehabilitation, it is hoped that animal recovery will be an attendant benefit. Projects to control erosion and improve or restore habitat were also completed at many parks. Staff at Point Reyes National Seashore completed work on a portion of a major erosion control project that over time will abate stream sedimentation on parklands that were previously disturbed by 100 years of ranching activities. At Redwood National Park a diversion project was completed to restore salmon and steelhead habitat in lower Redwood Creek.

The control of exotic species and the reintroduction of native species are important aspects of vegetation management. Last year staff at Theodore Roosevelt National Park, in cooperation with North Dakota State University, the U.S. Department of Agriculture, and the North Dakota Department of Agriculture, began a program to study the use of two insects as biological controls for the exotic leafy spurge. The infestation of leafy spurge has increased approximately 25-fold since it was discovered in the early 1970s. Two caged colonies of each insect species were established in the park in 1987. Depending on their ability to adapt to the northern plains climate and barring other environmental



Scenic Walk - Redwood

difficulties, the park intends to use them as part of its integrated pest management program for leafy spurge and to reduce the need for chemical and mechanical controls.

An example of a successful reintroduction of native plant species is the endangered running buffalo clover, once common in open woodlands and along buffalo trails in the Ohio Valley but recently thought to be extinct. In 1983 several clover plants were discovered just outside the boundary of New River Gorge National River. Cuttings from these plants were propagated at the University of Kentucky, and in 1986 plants were reintroduced into the park. Last year 11 of them flowered and were growing vigorously. With continued success, it is hoped that this species will become reestablished in the park.

We continued to gain knowledge about the effectiveness of prescribed fire in restoring natural conditions in parks and reducing the possibility of catastrophic fires. At Lava Beds National Monument managers began implementation of the fire management plan by instituting a 2,000-acre prescribed fire and conducting a mini-symposium, attended by vegetation management specialists, to review the use of prescribed fire in the monument. Pipestone National Monument completed its 15th year of utilizing prescribed burns in efforts to maintain or reestablish the tallgrass prairie ecosystem. The staff at Muir Woods National Monument organized an information campaign about a planned prescribed burn, the purpose of which was to reduce conditions for a catastrophic fire in the redwoods. Because of the involvement of other agencies, organizations, and the public in planning for this controversial resource management program, support for the Park Service action was positive.

Water Resource Improvement. Maintenance and improvement of water resources is an important goal of park management, and many monitoring and reclamation projects continued last year. For example, staff at Big Cypress National Preserve completed the initial phase of the Turner River project – the first restoration of a natural river system in Florida. Road construction in the 1960s diverted natural waterflows into canals, causing greater saltwater intrusion into the area. New culverts under the road will now place the water back into the old riverbed. Continuing research on groundwater movement in the Mammoth Cave area has led to the discovery of monitoring principles that can benefit the worldwide scientific community. The information developed by researchers is being used by the U.S. Environmental Protection Agency and a number of state agencies to protect public health from leakage of landfills, toxic waste dumps, and sites where hazardous materials have spilled.



Turner River – Big Cypress



# National Natural Landmarks

May 1987 marked the 25th anniversary of the national natural landmarks program. At a ceremony celebrating the event, NPS Director William Penn Mott and Assistant Secretary of the Interior William Horn spoke and presented awards to individuals who made significant contributions to the landmarks program during its first 25 years. In addition, Secretary of the Interior Donald Hodel added five new sites to the National Registry of National Landmarks in recognition of the 25th anniversary, bringing the total of national natural landmarks to 586. The five new sites include Dixon Vernal Pools, a 15,200-acre area in California that represents the best remaining example of needlegrass grassland in the Central Valley; Archbold Biological Station, a 4,250-acre site in Florida that encompasses the largest known tract of natural communities characteristic of the Lake Wales Ridge physiographic area; Mount Monadnock, a 4,578-acre isolated mountain remnant in New Hampshire that exhibits the effects of Pleistocene glacial erosion; Nancy Brook Virgin Spruce Forest and Scenic Area, a 1,590-acre virgin montane spruce forest in New Hampshire; and Willamette Floodplain, a 682-acre site in Oregon that represents the largest remaining unplowed example of interior valley grasslands in the North Pacific Border natural region.



Mount Monadnock

ILLINOIS & MICHIGAN CANAL INDEPENDENCE INDIANA DUNES INTERNATIONAL PEACE GARDEN ISLE ROYALE JAMES A. GARFIELD JAMES MONROE JAMESTOWN JEAN LAFITTE

The national natural landmarks program was established in 1962 to encourage preservation of the best remaining examples of the major biotic communities and geological features of the United States. It is the only national program to identify and recognize the best examples of biological and geological features without regard to site ownership or management. The program seeks to encourage the preservation of natural diversity in species, biotic communities, and their associated habitats. As Director Mott said at the anniversary ceremony, "The national natural landmarks program performs a unique and valuable function for the Service and the Department. I am proud of the record the landmarks program has achieved since 1962. It is my hope that the landmarks program will continue to demonstrate that natural area preservation, regardless of the protection tool used, must involve partnerships between the federal, state, and private sectors. We must start viewing each new natural area reserve as only one part of a larger nationwide protected area network."

Student Conservation Association

The Student Conservation Association has been a significant contributor to national park resource management programs for a number of years. The SCA is a nonprofit educational organization that provides high school and college students as well as people who are out of school the opportunity to volunteer their services for the conservation of national parks, public lands, and natural resources. It sponsors 3-5 week outdoor environmental work groups for high school students and 12-week resource assistant programs for college students. In 1987 the SCA placed 23 high school work groups in 21 parks and 234 resource assistants in 78 parks throughout the national park system. The value of the work performed by the SCA participants was more than \$1 million.



Lincoln Home Restoration

### **Cultural Resources**

With more than 8,000 historic buildings and 26 million artifacts under NPS management, cultural resource activities are a major part of our responsibility. These are just a few of our accomplishments from last year.

Preservation Activities. The Park Service was active on all preservation fronts in 1987. A number of restoration and stabilization projects were completed, and several others were initiated. Major restoration projects were completed on the Lindenwald mansion in Martin Van Buren National Historic Site, the Custom House in Salem Maritime National Historic Site, and the Steeple Building in Christiansted National Historic Site. At Yukon-Charley Rivers National Preserve the gold dredge that is part of the historic mining property at Coal Creek was stabilized, and a preliminary inventory of the cultural resources in the Coal Creek area was completed; this significant property was donated to the Park Service by the National Parks and Conservation Association in 1986. In May work began on the restoration of the only home that Abraham Lincoln ever owned - his Springfield residence in Abraham Lincoln National Historic Site. The principal goal of this project is to ensure the stability of the 149-year-old building, which has been visited by more than 10 million people since its inclusion in the national park system in 1972; however, restoration work has also revealed many previously unknown details that will increase knowledge about the home and the man. The project is scheduled for completion in May 1988, and an all-day observance and rededication is planned for June.

JEFFERSON NATIONAL EXPANSION JEWEL CAVE JIMMY CARTER JOHN D. ROCKFELLER, JR. JOHN DAY FOSSIL BEDS JOHN F. KENNEDY CENTER JOHN FITZGERALD KENNEDY



Statuary Preservation – Shiloh

We continued to make discoveries that will aid in ruins stabilization and increase knowledge about our significant prehistoric resources. At Chaco Culture National Historical Park a wood preservation project for stabilizing the most fragile elements of the ruins produced a large quantity of information on wood use in Pueblo Bonito; the pueblo's chronology of construction has been reordered based on this data. At Pecos National Monument staff initiated a ruins preservation project using adobe bricks that more closely approximate the original fabric of the ruins. If successful, this method can be used in at least four other parks.

National park system areas contain tens of thousands of statues, monuments, and memorials, and protecting them is a significant task. Statuary preservation was accomplished in several eastern parks in 1987. During the summer staff at Shiloh National Military Park cleaned, repointed, and waxed the bronze on six state monuments and the Confederate Memorial – the first major preservation work since they were erected about 80 years ago. Donated funds made it possible for Gettysburg National Military Park to restore six monuments, the largest of which – the Virginia Monument – had fallen into serious disrepair. In Washington, D.C., employees received hands-on training in statuary preservation when they cleaned, washed, and repointed two statues in Lafayette Park next to the White House.

Volunteers, friends groups, and other contributors made possible a wide range of preservation projects last year. For example, 125 volunteers at Kennesaw Mountain National Battlefield Park donated over 4,000 hours of work clearing and posting 19 miles along the boundary and restoring 3 miles of Civil War earthworks as well as providing living history demonstrations on summer Sunday afternoons. At Fort Larned National Historic Site donated funds were used to purchase materials, and park employees, VIPs, and youngsters from the Youth Center at Larned and local work-release programs worked under a very tight deadline to complete the construction, painting, and installation of replica barracks furniture in time for the park's Memorial Day Remembering Our Heritage program. These and similar efforts throughout the park system contributed significantly to the cultural resource program.

Historic Property Leasing. The historic leasing program continued to expand in 1987 and to provide the means for preserving and adaptively using significant properties. In the Skagway portion of Klondike Gold Rush National Historical Park four historic buildings have now been rehabilitated and leased for commercial uses including a jewelry store, professional offices, a newsstand, printing press and office, and a barber shop. The rental income from these properties will be used to maintain other historic properties in the park.

Other major leasing arrangements include those at Independence and Lowell national historical parks. At Independence the Thomas Bond house, a Georgian rowhouse, has been leased for use as an urban inn. The house is in need of complete renovation, and the lessee will be responsible for a large portion of this renovation as well as maintenance and upkeep. At Lowell the lessee has contributed over \$2 million to the restoration of the park-owned Old City Hall, Lowell's original town hall. The recently completed restoration is the Park Service's largest leasing project to date.

JOHN MUIR JOHNSTOWN FLOOD JOSHUA TREE KALAUPAPA KALOKO-HONOKOHAU KATMAI KENAI FJORDS KENNESAW MOUNTAIN KINGS MOUNTAIN KLONDIKE GOLD RUSH

National Historic Landmarks. The national historic landmarks program experienced continued success in 1987. Some 100 national historic landmarks were designated, bringing the total number of landmarks to more than 1,800. Notable examples in last year's additions included the Sumner Elementary School in Topeka, Kansas, the school connected with the landmark Supreme Court decision Brown vs. Board of Education: the Ahwahnee in Yosemite National Park, the grand hotel that epitomizes the rustic monumentality and luxury of the era in which it was built; the Oakmont Country Club in Pittsburgh, the oldest top-ranked golf course in the nation; Rockefeller Center in New York City, one of the most successful urban plans in the history of U.S. architecture; the U.S.S. Sequoia, the yacht used by nine U.S. presidents between 1931 and 1977; Taos Pueblo in Taos, New Mexico, which dates from the 14th century and exhibits continuous occupation to the present day; and the Frijoles Canyon CCC complex in Bandelier National Monument, the largest such complex in the country. Last year also witnessed the publication of the Catalog of National Historic Landmarks and revision and publication of the thematic outline of U.S. history and prehistory, which guides landmark studies.

Ethnography. A new program has been established in the Park Service to study and communicate information about ethnic communities associated with the parks. A major achievement of the ethnography program in 1987 was the publication of the final native American relationships policy, which was recognized by other agencies and departments as a model of reasonable guidance about consultation, access to sacred places, and other concerns of native Americans. In addition, substantial progress was made in completing an ethnographic report on the lifeways of the Dena'ina Indians in the Lake Clark National Park and Preserve area. This model field study, which will provide important information about subsistence, community values, and heritage, has already resulted in the documentary videotaping of the Dena'ina's traditional methods of fish preservation and plant gathering and use.



CCC Complex - Bandelier

Archeological Documentation. Identifying and recording archeological resources is an ongoing part of cultural resource management activities. A recent study indicated that nearly 40,000 archeological resources have been identified in the 13 percent of the national park system areas that have been systematically surveyed. Last year new and continuing identification and evaluation projects were conducted in a number of park areas, including Cape Krusenstern National Monument, Minute Man National Historical Park, Theodore Roosevelt National Park, and Valley Forge National Historical Park.

The Park Service's Submerged Cultural Resources Unit continued cooperative efforts with other government agencies, state governments, and the sport diving community in documenting underwater archeological resources. In a joint project with the Navy Mobile Diving and Salvage Units, we documented the U.S.S. Utah at Pearl Harbor, and in a cooperative effort with local community groups in Benicia, California, we documented and nominated to the National Register of Historic Places the 1843 whaling bark Stamboul. Ongoing research, assessment, and documentation of submerged resources continued at Cape Cod National Seashore, Salem Maritime National Historic Site, War in the Pacific National Historical Park, Fort Jefferson National Monument, and Glen Canyon National Recreation Area.



World Heritage Convention

In 1987 the World Heritage Convention emerged as the largest international conservation convention, with 100 member nations. The purpose of the convention is to document, recognize, and encourage the protection of natural and cultural sites around the world judged of outstanding universal value to mankind. The 1987 meeting of the World Heritage Committee, which directs the work of the convention, saw the addition of 41 properties from around the world to the World Heritage List, making a total of 288 recognized to date. Three new U.S. properties were given this international recognition: the Jefferson Architectural Theme (Monticello and University of Virginia), Chaco Culture Sites, and Hawaii Volcanoes National Park. Taos Pueblo was nominated by the United States and will be reviewed and decided upon in 1988. The United States now has responsibility for safeguarding 17 natural and cultural world heritage sites.



Chaco Culture

Resource Assessments

Last year the National Park Service completed a special study to evaluate resource management in the 341 units of the national park system. The goal of this initiative is to develop a long-range strategy to improve protection of the natural and cultural resources entrusted to our care. The two separate assessments for natural and cultural resources represent a first-of-a-kind examination of park resources on a nationwide scale and provide an overview of the health of our national parks, historic sites, monuments, seashores, wilderness, and recreation areas. Overall, most natural resources are judged to be in good or fair condition, but 15 percent of the parks report a major resource category in poor condition. More than half the parks indicate that one or more natural resources are threatened or potentially threatened, often by some outside source. The cultural resource assessment reveals that one-fourth of the sites, one-third of the structures, and one-third of the artifact collections are in good condition. But the status of many cultural resources is unknown because of an enormous backlog of historical research, documentation, inspections, and cataloging. The resource assessments, which fulfill point 1 of the Director's 12-Point Plan, identify the major issues and outline a progressive, professional approach to resource management. Many of the actions called for in the reports are already underway. This is an initial, but important, step toward safeguarding our parks into the 21st century. The information gathered by the project will enable us to produce thoughtful policies to guide park managers throughout the system.

### Land Protection

Actions to extend protection for park lands were widespread last year. Cooperative efforts were expanded to reduce threats from outside park At Hovenweep National Monument, for example, boundaries. significant Anasazi archeological remains have recently been identified on lands outside the present monument boundaries, most of which are administered by the Bureau of Land Management. Last year a preliminary agreement was signed by the Park Service and BLM establishing cooperative management strategies for a resource protection zone that includes the monument's six units and surrounding lands with identified resources. These strategies are intended to ensure the long-term preservation and interpretation of all of the region's significant prehistoric sites and remains while continuing to permit multiple uses on BLM lands. They propose inventory and protection of resources; extensive research; visual covenants; grazing, mining, and mineral exploration regulations; and land exchanges to bring some significant sites under federal administration. The strategies are currently being reviewed by the public as part of the monument's draft general management plan. Following review, they will be finalized, and a joint management plan will be prepared for their implementation.

Another example of cooperation in protecting and improving lands for public use is the ongoing work at Ice Age National Scenic Trail. Through the cooperative efforts of private, local, state, and federal agencies and organizations, the dream of establishing a 1,000-mile trail park along the entire length of the farthest advance of the last Wisconsin glacier is becoming a reality. This project, which had its inception in the late 1950s, was supported by two congressional actions – the 1971 establishment of the nine-unit Ice Age National Scientific Reserve and the 1980 designation of Ice Age National Scenic Trail, which will eventually link six of the nine units along its route. A great deal of the trail construction over the years has been accomplished by volunteers under the guidance of the Ice Age Park and Trail Foundation and the Ice Age Trail Council. Several counties and



Ice Age National Scenic Trail



Twin Towers – Hovenweep

municipalities, the state of Wisconsin, and the U.S. Forest Service have also built and maintained segments. The Park Service has administrative responsibility for the national scenic trail, and last year we established an office in Madison to coordinate management with other involved agencies and organizations. About 200 miles of trail segments have now been incorporated into the national scenic trail, and an additional 200 miles have been cleared, marked, and opened to public use. The state of Wisconsin recently enacted a law establishing the national scenic trail as a state trail as well. Under this law the state will match appropriations on a 2-1 ratio with the private sector for land acquisition and trail development.



Hetch-Hetchy Valley before the Dam



Bristlecone Pine - Great Basin

A proposal put forward by the Department of the Interior last year could have far-reaching effects for Yosemite National Park. Under the proposal the O'Shaughnessy Dam, which has flooded the Hetch-Hetchy Valley for more than half a century, would be removed. In its pristine condition, the Hetch-Hetchy Valley was considered second only to Yosemite Valley for natural beauty and serenity. Because the Hetch-Hetchy dam provides a significant source of water and electric power for the city of San Francisco, no removal plan would be considered that did not ensure an alternative water and power source for the city. In October 1987 Secretary of the Interior Donald Hodel and San Francisco Mayor Dianne Feinstein visited the reservoir and conducted a round-table discussion on the possibility of removing the dam and restoring the valley.

For more than 40 years the Park Service has been interested in establishing a tallgrass prairie unit to preserve and interpret a remnant tallgrass ecosystem. The tallgrass prairie once extended more than 400,000 square miles, but little remains today. In December 1987 the Oklahoma congressional delegation introduced legislation to create a 40,000-acre national preserve in Osage County, Oklahoma. The proposed area is about 60 miles northwest of Tulsa in the southern part of the Osage Hills. Congressional hearings have been planned for the spring of 1988, and they could well result in a tallgrass prairie unit being established this year.

A testimonial to a major land protection effort was held last August when dignitaries, park managers, and visitors gathered to dedicate Great Basin National Park as the 49th park in the national park system. Great Basin, which was authorized in October 1986, preserves a significant part of the Great Basin physiographic province – including Wheeler Peak and Lehman Caves – and many of the people who attended the dedication have worked for years to make its establishment a reality. Planning for Great Basin progressed in 1987 with the completion of an extensive public involvement effort to gather information and ideas about the future of the national park.



Two new national park system areas were established as 1987 came to a close. On December 23 legislation authorizing Jimmy Carter National Historic Site was signed by President Reagan. The main features of the historic site include Carter's current residence, his boyhood home on the outskirts of Plains, the now-vacant school that he attended, and the old railroad depot that served as his campaign headquarters during the 1976 presidential election. Most of the property will be donated to the Park Service. The legislation also established a preservation district to preserve Plains' rural character, and the Park Service will be responsible for coordinating preservation efforts. Plans are now being initiated to determine how best to interpret the story of our 39th president and the culture of the small southern town where he was raised.

The national park system was expanded to 341 areas on December 31, when President Reagan signed a law establishing El Malpais National Monument. The 114,000-acre national monument south of Grants, New Mexico, protects the nationally significant Grants Lava Flows and the Las Ventanas Chacoan archeological site. It is largely surrounded by the El Malpais National Conservation Area, which was also created by the legislation and is to be administered by the Bureau of Land Management. A vehicular tour route, Masau Trail, was designated to link El Malpais with other sites of antiquity in New Mexico and Arizona. The Park Service and BLM will undertake a three-year comprehensive planning effort to determine future actions for the monument and conservation area.





Carter Boyhood Home - Jimmy Carter



Sandstone Bluffs – El Malpais

Railroad Depot -Jimmy Carter



Two new Trails

On May 8, 1987, the Santa Fe Trail was officially included in the national trails system as a national historic trail. This trail, which extended 950 miles from Old Franklin, Missouri, through Kansas, Oklahoma, and Colorado to Santa Fe, New Mexico, was a major highway of commerce from 1828 to 1890 and a route for mountain men, gold seekers, military expeditions, California-bound settlers, and early-day tourists. In many places only faint traces of the trail remain, and the law calls for it to be officially documented and protected. The law also encourages states, interested organizations, and private landowners to become part of a grassroots effort to preserve the trail and promote public use and enjoyment of it.



Santa Fe Trail

On December 15 the Trail of Tears was designated as a national historic trail. The Trail of Tears, whose land and river route covers 1,800 miles, commemorates the 1838 forced removal of as many as 15,000 Cherokee Indians from their homeland in the East to new lands in Oklahoma. The designation was the culmination of four years of planning and coordination by the Park Service, the eastern and western Cherokee tribes, and the states through which the trail passes – North Carolina, Georgia, Kentucky, Tennessee, Alabama, Illinois, Missouri, Arkansas, and Oklahoma.

Both laws called for the establishment of 35-member advisory councils to provide advice on trail matters including selection of trail routes and rights-of-way, official mapping, and standards for signs and other developments along the routes. The Park Service will be the lead agency in administering and coordinating efforts related to the trails. Comprehensive management plans are being initiated for both the new national trails system units.



NORTH COUNTRY OBED OCMULGEE OLYMPIC OREGON CAVES OREGON ORGAN PIPE CACTUS OVERMOUNTAIN VICTORY OZARK PADRE ISLAND PALO ALTO BATTLEFIELD





The visibility of the Take Pride in America campaign grew tremendously in 1987, and the Park Service broadened its participation in many ways. The number of Federal Lands Clean-Up Day projects alone nearly tripled. On that September day 9,000 volunteers in national parks across the country contributed thousands of hours of work on hundreds of projects at a total savings of nearly \$270,000.

Volunteer projects in parks last year varied from cleanup to planting trees and flowers to building trails. At Glen Canyon National Recreation Area volunteers joined in the Page Attacks Trash effort. At Valley Forge National Historical Park members of the Liberty Bell Chapter 6 Telephone Pioneers of America completed the Trees for Valley Forge project. Outreach and education efforts by NPS employees and volunteers greatly aided the national campaign effort, increasing citizen awareness and stewardship of parks. For example, at Big South Fork National River and Recreation Area staff and professors from Tennessee Technological University presented four Take Pride in America programs to foster appreciation of the park's resources and encourage residents to guard against looting of important archeological sites; participants received continuing education credits for attendance.

A highlight of the year was the Take Pride awards ceremony in July, where NPS nominees received three out of four federal government category national awards. President Reagan presented these awards to C&O Canal National Historical Park for its highly successful series of cleanup camporees, to Ozark National Scenic Riverways for its major river-long cleanup, and to Ron Switzer for developing a model program for Boy Scouts of America participation in the Take Pride campaign. These successes exemplify the dedication of the Park Service and the thousands of national park volunteers to the Take Pride goals.



Spokesmen Lou Gossett, Jr., and Clint Eastwood, Interior Secretary Hodel, President Reagan, Agriculture Secretary Lyng, and Education Secretary Bennett at Take Pride Awards Ceremony

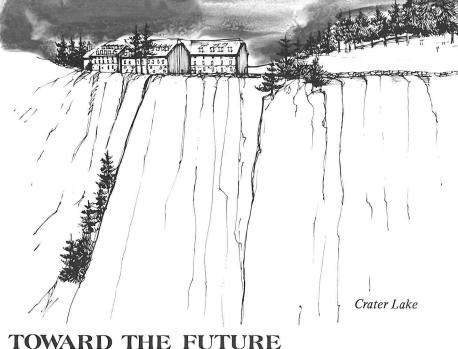


Trees for Valley Forge



Page Attacks Trash

PEA RIDGE PECOS PENNSYLVANIA AVENUE PERRY'S VICTORY PETERSBURG PETRIFIED FOREST PICTURED ROCKS PINELANDS PINNACLES PIPE SPRING PIPESTONE



### **Research and Technology**

Research is the key to our knowledge and understanding of park resources and how to preserve them in the future. As indicated in the resource assessment study completed last year, the prognosis for our national parks is mixed, and much remains to be done to reduce or eliminate threats to our most precious natural and cultural features.

Baseline data is critical in assessing threats and changes to plant and animal populations, and research and monitoring efforts throughout the national park system are contributing to scientific knowledge. Alaska, which remains isolated and largely undisturbed, provides an important laboratory for gathering baseline information. For example, continuing work in Glacier Bay National Park and Preserve is providing knowledge and understanding of the endangered humpback whale, which will allow better protection of this important species. A study was completed last year that analyzed 11 years of humpback whale monitoring, one of the longest series of data available for populations of baleen whales. Baseline wolf studies are also being conducted. A study was initiated in Gates of the Arctic National Park and Preserve last year to determine the size of wolf packs, home ranges, reproductive success, and the effects of harvest on the population. Thirty wolves were radio-collared in 18 different packs, and initial data shows a healthy wolf population with a fairly traditional territorial distribution pattern.

Lake research is expanding. In 1986 Congress passed a bill listing 22 national parks with significant thermal features. The bill is intended to protect such features from geothermal exploitation. At Crater Lake National Park, one of the areas listed, the Park Service has initiated a three-year research program to describe the lake's thermal features and determine their significance to lake ecology. Studies of the heat flow in the sediments at the bottom of the lake have led researchers to suspect the presence of hydrothermal vents. In August 1987 researchers from Oregon State University filmed portions of the lake bottom. Using a robot sub and remote videocamera, they observed hydrothermal precipitates and diffuse flows at two sites. These observations are compatible with dispersed flow through sediments from a number of vent sites. Small manned submersibles will be used in 1988 to provide more thorough mapping of the thermal features and to sample the venting fluids. With assistance from the U.S. Fish and Wildlife Service and Oregon State University, the Park Service also completed the first year of a three-year limnology and fisheries study of Surprise Lake in the caldera at Aniakchak National Monument and Preserve. Researchers mapped depth contours, collected samples, and determined general water chemistry and biological parameters.

Major new discoveries were made in several of the cave systems in national parks. At Carlsbad Caverns National Park discoveries in one of the park's 74 backcountry caves are believed to be the most significant since the Guadalupe Room was found in the mid-1960s and possibly since the park was opened in 1923. The cave, known as Lechuguilla Cave, is within the park's designated wilderness area 4 miles from the

main cavern. Although the opening and entrance room have been known since the early 1900s, events over the years apparently blocked the small opening on the entrance floor that leads to the cave proper. The cave has now been explored to a depth of 1,207 feet below the surface and has been surveyed at just over 7 miles. Newly discovered areas contain many limestone and gypsum decorative formations and several clear pools.

Other cave discoveries were made at South Dakota's sister park areas, Jewel Cave National Monument and Wind Cave National Park. The 75th and 50th mile, respectively, of caves within these parks were mapped during explorations last year. The newly surveyed portions of Wind Cave generally orient in a northerly direction, which is of interest because Jewel Cave lies only 18 miles to the west-northwest and there is speculation that its subterranean works are somehow connected with those of Wind Cave.

The Park Service participated in several cooperative studies in 1987 to assess the effects of air pollution on park resources. For example, a major study concerning how to apportion the air pollution that contributes to wintertime hazes in southern Utah was conducted in cooperation with the Electric Power Research Institute, Salt River Project, Environmental Protection Agency, and several universities. Biomonitoring projects were also undertaken in a number of parks to help identify the impacts of air pollution on native vegetation. The Park Service air quality monitoring network grew by nine sites last year, increasing the number of NPS units with air quality monitoring stations to 65. A major initiative for 1988 is the "Clearing the Air" campaign. The results of work accomplished as part of the air quality program are discussed in the Clearing the Air feature.

Technological advances continued to improve operational efficiency and information dissemination last year. The servicewide COMMON, NPSFLORA, and cultural resource networks and databases were expanded, and we continued to implement the maintenance management system for planning and managing the \$250 million annual



Carlsbad Caverns

program. This system will enable maintenance managers and superintendents to maximize productivity by analyzing work methods, materials, and personnel, developing performance guidelines, and reviewing work accomplished. When fully implemented, it will be used in 260 park areas. A total of 178 parks have already been brought on line, and the other 82 areas are scheduled to join the system in 1988-89.

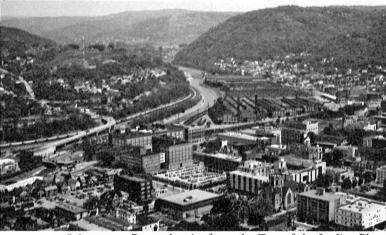
An important technological advancement for our design and construction program came about last year with the implementation of a computer-aided design and drafting system. The system is expected to enhance the analysis of design alternatives and to expedite the production of high-quality construction drawings. The CADD is one of many innovations that are enabling the Park Service to accomplish its mission in a professional and cost-effective manner.

### Planning

Planning for the future of national parks is an important responsibility. Many new areas have been added to the park system in recent years, and many established parks have witnessed changes that require new thinking. Nearly 200 plans and studies were completed last year – all with the objective of conserving resources and promoting public use while reflecting the changing needs and interests of today's society.

An example is the draft general management plan for Saguaro National Monument. This highly scenic desert park lies on the east and west sides of the Tucson metropolitan area and is directly affected by development and land use in this burgeoning city. The Saguaro plan was preceded by extensive public and agency involvement to identify ways to ensure continued protection of the park's significance resources and define its role in relation to other public lands in the region. The plan hinges on strong ties with nearby land managers and owners. It proposes the establishment of a regionwide interagency forum to coordinate future planning, wildlife and air quality research, informational services, and development proposals, including a regional trail system. To reduce the effects of automobile traffic on wildlife within the west district of the park, it recommends that the number of through roads be reduced in conjunction with the provision of alternative access routes outside the boundary. These actions, together with proposals for increased resource protection, better information and interpretation, enlargement or redesign of facilities and trails, and expanded cooperation with the managers of other public attractions in the vicinity, will minimize the effects of urban land use on park resources, expand the range of experiences available to visitors, and increase people's awareness and appreciation of all of the attractions in the region.

Two cooperative planning efforts moved forward last year that will not only preserve significant sites and features but may contribute substantially to the attraction and economic growth of areas in Pennsylvania. The America's Industrial Heritage Project, a major



Johnstown, Pennsylvania, from the Top of the Incline Plane

coordinated effort to tell the story of the iron, steel, coal, and transportation industries in America, made great strides under the guidance of the Heritage Preservation Commission and Park Service coordinators. The project, which involves four national park system areas and a number of other significant sites in southwestern Pennsylvania, is supported by local, state, and federal agencies, private companies, and preservation groups. The Heritage Preservation Commission has put together an action plan for development, and Congress has authorized the funds for the first phase of the project. The locally operated Johnstown Flood Museum is currently being rehabilitated and filled with new exhibitry for the centennial commemoration of the disastrous Johnstown flood of 1889. Visitor centers are being planned or developed by the city of Johnstown, Johnstown Flood National Memorial, the Altoona Railroaders Memorial Museum, and other organizations to interpret and give visitors views of the historic incline plane, the site where the dam was breached, and the switchback that first enabled steam locomotives to climb over the Allegheny Mountains. These and other proposed projects are a first step toward preserving the region's industrial, cultural, and natural heritage and encouraging tourism and economic revitalization.

A second major project is the plan for Steamtown National Historic In the year since the park was authorized in Scranton, Site. Pennsylvania, to preserve reminders of the steam era of railroading, a Park Service planning team has held public workshops, published four newsletters, and produced a draft comprehensive management plan for the area. The plan proposes that a working railyard be developed and that Steamtown be incorporated into an extensive urban renewal effort in downtown Scranton. Some of Steamtown's collection of more than 100 locomotives and passenger and freight cars - one of the largest collections in the U.S. - will be put in working order or placed on display. The plan also envisions coordinating visits to Steamtown with other local sites like an exhibition coal mine, a geologically significant gorge, and a historic ironmaking furnace. It is hoped that a concessioner will ultimately run day-trip steam locomotive excursions from the railyard through the surrounding countryside. Efforts have already had spinoff effects, encouraging conservationists to begin plans for a greenway corridor along the Lackawanna River through Scranton and spurring preservationists to save the city's many historic structures.

### **Conferences and Seminars**

Conferences and seminars in 1987 continued to provide a valuable forum for exchanging ideas and information about issues and trends of critical importance to the Park Service. We held annual ranger, superintendent, and regional director conferences and also hosted or participated in several special gatherings.

In early June the first conference in NPS history to focus on urban areas was held in New York City. The five-day event was hosted by Gateway National Recreation Area. More than 120 superintendents, other Park Service officials, representatives from federal, state, county, and local agencies, academicians, and private citizens gathered to discuss such topics as the critical role of urban parks, challenges for urban superintendents, ways to best serve urban visitors, urban resource management, marketing and communications, and alternative versus traditional management strategies. Work sessions were held during the



Steamtown Excursion Train

week, and some of the suggestions that resulted from them included short-term exchange of urban and rural staffs, more sensitivity to urban trends and problems, more formal links between the Park Service and allied groups like visitor and convention bureaus, and more successful outreach programs. The concluding speaker noted that the Park Service can be an effective bridge between diverse peoples in urban areas and can provide a living demonstration for urban populations of the most noble values we seek to preserve and protect.

In September we cohosted the 4th World Wilderness Congress, the first such conference to be held in the U.S. World leaders and conservationists from many countries met in Colorado to launch a new initiative in worldwide conservation. Some of the items addressed were tropical forests and biological diversity, the role of the World Bank and multinational corporations, global scientific research, and the cultural need for conserving wildlife and wildlands.

Also in September we held the first annual NPS Design Workshop to provide Park Service designers and other participants with a historical perspective on Park Service design as well as a philosophical basis and state-of-the-art information for generating creative approaches to today's design problems. More than 200 attendees and 30 speakers from the Park Service, other agencies, and the private sector participated in this successful conference.

In November we participated in the National Association of Interpretation's National Interpreters Workshop in St. Louis. This was the first time a national forum was provided for interpreters from throughout the country, and a solid framework was established for future collaboration between the Park Service and NAI.

### **Other Cooperative Activities**

Management of national parks is made much more effective because of cooperation and coordination with other public and private land managers and owners, communities, organizations, and citizens with interest in preserving public lands and resources so that they can be enjoyed now and in the future. Cooperative activities have been highlighted throughout this annual report – cooperation in programming and providing visitor services, in operations and maintenance, in research and management of natural and cultural resources, and in land protection. Following are some other significant accomplishments of 1987.

One of the 12-Point Plan action goals is to pursue cooperative agreements with land managers, owners, and communities near park areas for the protection of resources and values. In 1986 we signed such an agreement with the Bureau of Land Management, and last year we firmed a similar agreement with the U.S. Forest Service. The Forest Service agreement emphasizes communication and coordination at all levels, including formulating and implementing programs for issues that cross jurisdictional lines or affect an entire ecosystem, joint research and programming for long-range forecasting, participating in formal review where one agency's plan may affect the other agency, and assisting each other in providing visitor services and facilities. The Park Service and Forest Service already coordinate and exchange services in a number of national parks and forests, and they provide joint training in planning, acid rain, wilderness, and fire management. Cooperative projects that will be undertaken as a result of the agreement include studying the impacts of aircraft noise on national parks and wilderness, investigating ways to minimize the effects of oil and gas leasing on national park areas, initiating a geographic information system project to obtain better resource data for ecosystem management, developing consistent trail management policies, and developing cooperative visitor centers and cultural centers in California and New Mexico.

On the international level, the Park Service continued its leadership responsibilities in heritage conservation. Since the establishment of Yellowstone in 1872, more than 4,200 national parks and protected areas have been set aside in 135 nations throughout the world. During 1987 we were active in meeting commitments under bilateral agreements with 12 nations and in advancing heritage responsibilities



Taj Mahal

under two major treaties – the World Heritage Convention and the Convention of Nature Protection in the Western Hemisphere. We cohosted the 8th General Assembly of the International Council on Monuments and Sites, the 4th World Wilderness Congress, and the U.S./U.K. Countryside Stewardship Seminar, we provided U.S. based training and orientation to more than 500 conservation officers from 57 nations, and we responded to a new request for collaboration with the government of India in planning its first national historical park – the Taj Mahal World Heritage Site. This project is now underway, with planning scheduled for 1988.

A major area of international cooperation was opened last year when the Park Service participated in an international exchange with the U.S.S.R. and Poland. From June 22 to July 4 NPS Deputy Director Denis Galvin headed a six-member delegation to the two countries to explore possible bases for NPS cooperation under presidential agreement and international treaty provisions.

The trip to the U.S.S.R. was the first exchange as part of a new project on heritage conservation and management under the U.S./U.S.S.R. Environmental Agreement of 1972. While in the country, the NPS delegation negotiated a protocol with its counterpart agency, the State Committee on Civil Construction and Architecture, identifying priority areas for further cooperation. The Park Service is interested in Soviet technical assistance in the conservation and interpretation of Russian colonial heritage sites in the U.S. and in coordinating actions that will lead to the commemoration, through joint park designation, of the Bering land bridge theme. The Soviets are seeking continued interactions in site planning, management and operations, and ecological monitoring. During the visit the NPS delegation took part in the first Soviet seminar on national parks management, which included representatives from the 14 national parks in the U.S.S.R.

During the trip to Poland, the NPS delegation met with representatives of the Ministry of Environment and Natural Resources to discuss possible cooperative projects for parks and with the Ministry of Culture and the Polish Committee of ICOMOS regarding cooperation in historic preservation and restoration technology. Preliminary proposals included joint workshops of specialists from both countries focusing on designated world heritage sites in Poland, with topics including the effects of air pollutants on cultural monuments, conservation of cultural landscapes, and visitor management strategies at national parks.

In October a Soviet delegation representing both natural and cultural resource interests visited the U.S. to learn about American conservation systems and to finalize the protocol of agreed areas of cooperation. While in this country, the delegation visited five eastern national parks, including Great Smoky Mountains National Park, Antietam National Battlefield, Boston and Lowell national historical parks, and Saugus Iron Works National Historic Site.

### **Training and Development**

We have taken important steps toward achieving the 12-Point Plan goal of expanding career opportunities for our employees. A task force initially established in 1986 to study grade comparability has produced two important tools for NPS career management. The first is a demographic study of the park ranger series, which was undertaken to project mobility and promotion opportunities within the series. The

THEODORE ROOSEVELT ISLAND THEODORE ROOSEVELT THOMAS JEFFERSON THOMAS STONE TIMPANOGOS CAVE TONTO TOURO SYNAGOGUE TRAIL OF TEARS TUMACACORI

study provides important insights about opportunities over the next several years as well as a great deal of statistical information that can be used to evaluate career goals. The second tool is the "Career Management Concept" handbook — an effort to systematize the immediate and long-range development of employee skills and abilities. The handbook suggests processes for effective management of the current and future work force that will aid in realizing employee career goals and in meeting the needs of the Park Service. It also defines the elements of effective career planning and identifies the many tools and programs available for use. The handbook is intended to help employees define or refine their career planning efforts and to visualize options for designing their own careers. Both the demographic study and the handbook will be updated yearly.

Training was also a key factor in employee development. We continued to expand training programs in management and supervision and to offer a wide variety of specialized courses to increase employee skills in operations, resource management, and interpretation. A first-of-a-kind training course was held last fall in response to the 12-Point Plan challenge to "share effectively with the public our understanding of critical resource issues." This servicewide training initiative was started in September and was entitled the Critical Natural Resource Issues Interpretation Workshop. The goal of the workshop was to foster better understanding of this subject and to encourage the development of new interpretive programs, products, and activities that would be readily usable by park personnel. The workshop had very successful results, and a series of new interpretive programs and devices focusing on critical natural resource issues are now circulating throughout the park system.

As a lasting tribute to former Director Horace Albright, the National Park Service and the National Park Foundation have established an endowment fund in his name. The Horace Albright Employee Development Fund provides grants each year to qualifying NPS employees to enhance their knowledge and skills. The fund is intended to reach employees at all levels of the organization, and it provides opportunities beyond the reach of regular NPS training funds. The Albright Fund's first awards last year totaled \$70,000, benefitting 26 employees with sums ranging from \$640 to \$8,600. The winners were chosen by a panel of Park Service employees from a variety of backgrounds. The grant program is supported entirely by private contributors.

### Organization

Point 12 of the 12-Point Plan called on Park Service managers and employees to seek ways to establish a more creative, efficient, and effective organization. Through new technologies, shared information, training and development, and the use of fee enhancement funds, we are advancing toward that goal. To further the objectives of efficiency and effectiveness, last January Director Mott appointed an Organizational Structure Task Force to look at the organization and to recommend how the resources available to it can be most effectively put to work in support of park operations to meet the challenge of the future. The task force was divided into four groups that examined administrative programs, operational programs, technical service centers and external programs, and the structures, roles, and functions of the Washington and regional offices. During a four-month period members conducted personal interviews, reviewed files, and circulated questionnaires to help identify recommendations for improved management oversight and support of parks. The results of the task force study were published in June. Central to the recommendations were the need to develop and implement a plan for automatic data processing and information systems management and to establish a process for analyzing and responding to change as an integral part of the management system.

Recognizing that suitable living conditions are essential to a creative and enthusiastic work force, we are also beginning a major housing initiative in national parks. The Park Service currently administers more than 5,000 housing units in two-thirds of the park areas. The housing inventory is old and in poor condition. It is costly to maintain and maintenance costs are continuing to escalate as a result of rapid deterioration. Because of these concerns and at the request of the congressional committee, an employee housing report was completed in 1986, which identified the need to construct new housing to replace trailers throughout the park system, to provide additional seasonal units, and to repair and rehabilitate most other units. Top priority for replacement are those units in obsolete or poor condition and substandard trailers.

To proceed in an orderly and cost-effective manner, in April 1987 Director Mott appointed a Housing Oversight Committee. The committee is charged with developing design standards for new construction and major rehabilitation of housing units and providing guidelines for proper site selection so that park housing will harmonize with and complement the park environment. An employee survey is also underway to ensure that designs are functional and compatible with the needs of employees and their families.



Grizzly Bear Collaring



12-Point Plan Update

When the 12-Point Plan was presented in 1985, it was presented at Yellowstone. Our oldest national park provided a dramatic backdrop for lively exchanges between Director Mott, the news media, and various environmental groups. Two years later, in 1987, Director Mott called on NPS regional directors to report their accomplishments under the plan. The 1987 Regional Directors Conference once again brought together environmental groups, news media, and NPS officials at Yellowstone. Each of the ten regional directors capsulized their many contributions to the management of the national park system – from the identification and removal of hazardous wastes to the implementation of the fee program. Research, employee development, land protection, and community outreach all demonstrated notable success.

Putting the work of the National Park Service in perspective, one conference speaker remarked that the national park system should strive to be 341 branch campuses of the greatest university in the world. As if in support of this effort, the second meeting of the Yellowstone Coalition met at the park, simultaneously with the Regional Directors Conference. Actively involved in protecting the Greater Yellowstone ecosystem, the group brought together experts on the flora and fauna of the region. The exemplary work of individuals involved in grizzly bear research was publicly acknowledged by Director Mott at the banquet concluding the meeting.



21st Century Task Force

In keeping with the goals of the 12-Point Plan, Director Mott established the 21st Century Task Force last year – the first task force of its kind in the history of the Park Service. The task force is charged with searching out and analyzing relevant information on technological, social, and other trends that will directly or indirectly affect the Park Service and the park system in the future. The task force held its first meeting in November 1987 and defined general goals and time frames. Its work is expected to extend into 1989. Gathering reliable, predictive information and assessing what the Park Service needs to do to move effectively into the future is a task of critical importance, and it will require widespread participation and support. The task force will be seeking ideas from Park Service staff at all levels on how we can best fulfill our 21st century role.

1988: The Clearing the Air Smithative

Air pollution is one of the most serious threats facing national parks today. It can damage significant biological, cultural, and geological resources and degrade visibility. Through research and monitoring, the Park Service has identified a number of air pollution concerns in the national park system.

Ozone concentrations approach or exceed the national ambient air quality standard in several park units, including remote rural parks as well as parks closer to cities. Visible ozone injury to vegetation has been observed in most of the approximately 50 park units that have been surveyed. Narrower than expected genetic diversity of ozone-sensitive species has been found in certain park areas. Air pollution is also causing varying degrees of visibility impairment at all of the Park Service monitoring stations in the lower 48 states virtually all of the time. The Park Service has not been monitoring visibility long enough to establish long-range trends; however, National Weather Service data show that summertime visibility over much of the eastern United States has decreased more than 50 percent since 1948 to a current visual range of less than 15 miles.

The research conclusions and unresolved issues discussed in the 1987 *Interim Assessment* of the national acid precipitation assessment program show that among the categories of resources likely to be most susceptible to harm from air pollution are those that typify what the national park system was established to protect — high elevation forests, mountain lakes, native vegetation, scenic vistas, and historic features made of bronze and stone. In addition, the assessment's predictions indicate that the threats from air pollution will worsen in a number of areas in the future.

Because of these significant findings, Director Mott has called for a "Clearing the Air" initiative in 1988, and park areas throughout the country are launching a major public information campaign. The initiative is a cooperative effort involving research, resource management, and interpretive personnel. Its objectives are to foster public understanding of the causes and effects of acid rain and other pollutants, to communicate how particular national parks are helping to cope with this problem, and to train NPS interpreters so they can provide accurate information on these subjects to the public. An inventory of available media and educational programs dealing with air pollution was completed in 1987. In addition, pilot public information programs were conducted at Great Smoky Mountains and Sequoia national parks, and visitor responses were evaluated to help develop materials for the initiative. In the fall, information packets were sent to more than 250 park areas in anticipation of the 1988 program. Materials to support the public information campaign include a brochure on acid rain and related pollutants, a videotape about our watershed program, a slide library and audiovisual program, and a manual of case studies. An automated encyclopedia will enable park personnel to obtain up-to-date, scientifically accurate information on air quality/acid rain effects at local, regional, and global levels.

# FISCAL YEAR 1987 FINANCIAL REPORT (dollars in thousands)

### **OPERATING PROGRAMS**

### GRANT AND AID PROGRAMS

Operation of the National Park System Management of park areas Concessions management Interpretation and visitor services	\$	70,434 3,984 76,979	Histor Sta Na
Visitor protection and safety Maintenance Resources management		87,084 248,514 96,498	Land Sta
Information publications International park affairs Volunteers-in-parks Enhanced park operations		3,750 854 479 15,000	Statu Ro
General management plans Forest fire suppression and rehabilitation		2,335 14,319	Ice Lo
General administration Subtotal National Recreation and Preservation	\$	71,154 691,384	Jol Wa Ma
Recreation programs Natural programs National Register programs Environmental compliance	\$	628 1,617 6,758	Ma Fis Jar
and review Grant administration Subtotal	\$	396 1,529 10,928	Bis Ste
Operation of John F. Kennedy Center	\$	4,771	Illinoi He
Land Acquisition and State Assistance Land acquisition administration LWCF grant administration Subtotal	\$ \$	5,000 2,270 7,270	Jeffer Me
Total Operating Appropriations	\$	714,353	

	Historic Preservation Fund		
4	State grants	\$	20,000
4	National Trust		4,250
9	Subtotal	\$	24,250
4			
9 4 4 8	Land and Water Conservation Fund		
8	State Grants	\$	32,700
0			
4	Statutory or Contractual Aid		
9	Roosevelt Campobello		
0	International Park	\$	408
5	Ice Age National		
	Scientific Reserve		573
9	Lowell Historic		
4	Preservation Canal Commission		537
4	Johnstown Flood Museum		398
	Warren G. Harding Memorial		538
	Mary McLeod Bethune NHS		199
8	Martin Luther King, Jr. Center		199
7	Fisk University - Jubilee Hall		168
8	James Garfield National		
	Historic Site		468
6	Bishop Museum		200
9	Steamtown USA		8,000
8	Subtotal	S	11,688
0		-	,
1	Illinois & Michigan Canal National		
20	Heritage Corridor Commission	S	250
0	Jefferson National Expansion		
0	Memorial Commission	\$	75
0		Ψ	10
-	Total Grant and Aid		
	Programs	S	68,963
2	i i ogranns	Ψ	50,705

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### **CAPITAL INVESTMENT PROGRAMS**

Construction Planning Emergency and unscheduled	S	13,100
projects Line item projects Subtotal	\$	3,000 71,995 88,095
Federal Lands Highway Program	\$	60,000
Land Acquisition	\$	70,160
Construction (Trust Fund) Cumberland Gap Tunnel project George Washington Memorial	\$	10,000
Parkway Subtotal	\$	2,500 12,500
Total Capital Investments	\$	230,775
DONATIONS		
Statue of Liberty/Ellis Island Project All Other Donations (cash)	\$	4,650 3,913
Total Donations	\$	8,563
Grand Total	\$1	1,022,634



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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, and parks and recreation areas and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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