

THE
FUTURE
OF
AMERICA'S
NATIONAL
PARKS

First Annual
Centennial Strategy for

Mammoth Cave National Park

August 2007

CENTENNIAL INITIATIVE



Site: MACA

Year: 2007

Vision Statement

Mammoth Cave National Park is home to the world's longest cave. Dubbed "grand, gloomy, and peculiar" in the 1800s, the great cave still holds the unknown, the undiscovered. The park landscape is the preeminent example of karst topography, including caves, hilly country, sinkholes, karst windows, and sinking springs.

Underground, 130 animal species use the cave on regular basis, some as visitors and some, eyeless and unpigmented, living only in the cave. Above ground, the park boasts an old-growth forest, prairie remnants, second-growth forest nearing 90 years old, and 52 species of mussels in Green River, making it one of the most diverse rivers in the NPS.

Humans entered Mammoth Cave 4,000 years ago to scrape gypsum crystals from its walls. Settlers washed saltpeter from cave sediments to make gun powder. 1816 marked the first tour of Mammoth Cave; it was privately operated for more than 100 years. Conversion of privately-owned, settled areas to parklands (at MACA, SHEN, and GRSM) was without precedence in the United States.

In 2016:

- Mammoth Cave NP is able to sustain its culture of collaborative management. Partnerships, philanthropy, and volunteer support continue to increase. Management decisions are responsive to the voice of the public.
- Interpretive activities are universally accessible and take advantage of emerging technologies. A variety of recreational opportunities attract an ever-increasing number of visitors. Ranger-led cave tours are a hallmark of Mammoth Cave.
- Park environmental education reaches every student in Kentucky. The park is also responsive to its international constituency of researchers, scientists, historians, students, and world travelers.
- The park is respected as a leader in environmental innovation.
- The park strives to reach its "desired future conditions" for all cultural and natural resources.
- Park constituents (local, state, national) understand the significance and relevance of the park and the cave. Karst is a common word.
- Benchmark anniversaries are celebrated: 1908-2008, 100th anniversary of the Kaemper cave map of Mammoth Cave; 1816-2016, 200 years of cave tours at Mammoth Cave; 1916-2016, 100th anniversary of the NPS; 1926-2016, 90th anniversary of the NPS Parks in the East movement (MACA, SHEN, GRSM); 1941-2016, 75th anniversary of Mammoth Cave NP; 1981-2015, 25th anniversary of the International Biosphere Reserve designation; 1990-2016, 35th anniversary of the World Heritage Site desi

Park/ Superintendent/ Program Manager

Patrick H. Reed

Site: MACA

STEWARDSHIP

Improve the condition of park resources and assets.

Rehabilitate high-priority historic buildings to good condition, and help communities to preserve their history through programs like Preserve America.

Restore all 17 individual National Register-listed historic structures and 3 Historic Districts to good condition. All historic structures needed by the park for administrative purposes will be rehabilitated according to the Secretary of Interior Standards, e.g. CCC Residences. All historic structures not needed for occupancy by the park, but preserved, will be available for interpretive purposes, e.g. Floyd Collins Home and Crystal Cave Ticket Office.

The work described currently is supported by OFS and/ or PMIS

Restore native habitats by controlling invasive species and reintroducing key plant and animal species.

Ensure that the Exotic Plant Team, currently duty stationed at BLRI, visits the park multiple times on an annual basis to treat identified exotic, invasive plants. Park programs to reintroduce extirpated or threatened species, e.g. American Chestnut, Butternut, American Elm, Lady Slipper Orchids, etc. will be in place to ensure the viability of park vegetation and associated forest and prairie ecosystems.

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Improve the natural resources in parks, as measured by the vital signs developed under the Natural Resource Challenge.

Fully implement, in cooperation with the Cumberland Piedmont Inventory and Monitoring Network (CUPN), programs to monitor 15 vital signs. Management actions to address any potential impairment will be fully informed by the results of monitoring efforts.

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Site: MACA

STEWARDSHIP

Serve as the Preeminent resource laboratory by applying excellence in science and scholarship to understand and respond to environmental changes.

Other Park/ Program performance goal(s)

Fully integrate scientific inquiry and applied scholarship into the management of the world class natural and cultural resources preserved by this national park. Mammoth Cave National Park, through innovative leadership and programs from the Mammoth Cave International Center for Science and Learning, will provide students, visiting scholars, area citizens and members of the general public, with unique opportunities to participate in scientific investigations into environmental issues affecting park and regional resources.

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Site: MACA

ENVIRONMENT

Reduce environmental impacts of park operations.

Reduce the environmental impacts of park operations on air and water quality.

- Identify methods to improve air quality and reduce emissions within the park, using baseline data from the 2000 emissions survey.
- Partner with the park concessionaire to expand environmental leadership efforts by encouraging use of alternative fuel vehicles, reduction of water and electrical use, recycling efforts, signage to encourage visitor conservation, and other similar activities.
- Reduce energy usage by installing high efficiency compact fluorescent and LED light system on all lighted cave trails, replacing standard fluorescent or incandescent lights in park offices with compact fluorescent bulbs, and installing motion sensors wherever possible.
- Identify methods to reduce water usage, e.g., programs to increase employee awareness, use of waterless urinals and low water usage toilets.
- Install plastic shredder to enhance capacity for recycling plastics.

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Site: MACA

ENVIRONMENT

Inspire an environmental conscience in Americans.

Establish programs to showcase exemplary environmental practices and increase visitor awareness of how the practices apply to their daily lives, as measured by surveys.

- Support the Kentucky Personal Responsibility in a Desirable Environment coordinator by supplying office space, logistical, administrative and media support. The PRIDE coordinator will develop and implement a program of sinkhole dump site clean-up in the park and surrounding areas.
- Develop wayside exhibits and plaques to explain the Leadership in Environmental Engineering and Design System (LEEDS) certification process for the Visitor Center renovation and identify key components of sustainable and energy efficient design through interpretive plaques.
- Develop on-site curriculum-based learning activities on environmental design and energy efficiency for school groups visiting the cave and touring the LEEDS certified Visitor Center facility.
- Promote park efforts toward alternative fuel use and "green" energy through eye-catching painted information on an alternative fuel park vehicle that is broadly used both in the park and the surrounding area.
- Reinvigorate the Mammoth Cave Area Biosphere Reserve program through the Barren River Area Development District (BRADD), and use it to facilitate discussions among local and regional decision makers on sustainable development.

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Demonstrate environmental excellence through increased use of alternative energy and fuels at every park.

- Review the need for park vehicles on an annual basis, and replace vehicles only with those using alternative fuel sources: electric, hybrid, bi-fuel, etc., so that the park fleet will be made up of totally "green" vehicles.
- If available, utilize electric power generated by "green" methods rather than coal-burning power plants.
- Host the Annual Kentucky Clean Fuels Coalition annual meeting.

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Site: MACA

ENVIRONMENT

Inspire an environmental conscience in Americans.

Serve as a model for energy efficiency, under Executive Order 13423, by ensuring Leadership in Energy and Environmental Design (LEED) standards.

- Serve as a Center for Environmental Innovation, as designated in 2002 by the National Park Service, with a strong commitment to educating and working with employees, partners, and the public on the principles of sustainable practices.
- Ensure that the new renovation of the Mammoth Cave Visitor Center is fully certified at a gold LEED standard.

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Site: MACA

RECREATION

Encourage collaboration among and assist park and recreation systems at every level—federal, regional, state, local—to help build an outdoor recreation network accessible to all Americans.

Rehabilitate over 2,000 miles of trails within or connected to national parks, including trails accessible to those with disabilities.

- Prepare a Comprehensive Trail Management Plan. Develop PMIS packages, addressing 5 miles/year, according to the plan; the plan's life-span is 15 years.
- Construct a 9-mile bike/hike trail (largely accessible) along the historic route of the Mammoth Cave Railroad, running from the visitor center to Park City. Park City will connect its city bike trail to the park. Cave City, Brownsville, and Glasgow are also interested.
- Rehabilitate 14 miles of underground tourist trails (\$18 million project) in the next 10 years, including the cave elevator. The elevator, originally used for freight, was later upgraded for visitors but proved unreliable and unsafe for those with disabilities; the tour was discontinued in 2003. A \$100,000 feasibility study will explore alternative ways to make Mammoth Cave more accessible.
- Provide a safe canoe launch and improve Green River Ferry operation. The ferry is a key connection, linking the front- and backcountry of the park. The park holds 31 miles of scenic river valleys, which are popular canoe routes.

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Other Park/ Program performance goal(s)

Mammoth Cave NP works closely with and has a keen interest in the Reserve America contract between all federal land managers. In five years, the NPS will standardize the point-of-sales system; the park is involved in the development of the system.

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Site: MACA

RECREATION

Establish "volun-tourism" excursions to national parks for volunteers to help achieve natural and cultural resource protection goals.

Increase annual volunteer hours by 100 percent, from 5.2 million hours to 10.4 million hours.

Hire a full-time VIP coordinator under the Centennial Initiative and meet the national goal, increasing park volunteerism from 32,000 hours/year to 64,000 hours/year.

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Site: MACA

RECREATION

Focus national, regional, and local tourism efforts to reach diverse audiences and young people and to attract visitors to lesser-known parks.

Increase visitation by 25 percent at lesser-known parks through a national tourism effort aimed at helping people to discover the breadth of parks and experiences.

• Market the park through the Kentucky Federal Agency Tourism Council and other local and regional entities whose mission is to attract tourists to the area.

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Increase the number of visitors that attend ranger-facilitated programs such as campfire talks, hikes, and school programs.

• Hire additional seasonal employees under the Centennial Initiative to increase ranger-facilitated programs, campfire talks, hikes, and school programs available. At present, such programs are often filled to capacity or more.

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Site: MACA

EDUCATION

Cooperate with educators to provide curriculum materials, high-quality programs, and park-based and online learning.

Other Park/ Program performance goal(s)

- Engage local and state education officials in a three-day workshop on the use of on-line and emerging technologies for learning using park resource themes to meet state educational outcomes.
- Develop an on-line state curriculum-aligned teacher's guide using the planned Visitor Center exhibit as an additional learning tool for the classes visiting the park and touring the cave.
- Develop a fee-based pilot education program to provide an expanded number of classes with a non-personal service, on-site, surface resource educational program and support for the operation of the attended-station in-cave experience in the Discovery Tour route.
- Involve local middle schools in the inventory monitoring program of the park through the Mammoth Cave International Center for Science and Learning.

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Site: MACA

EDUCATION

Introduce young people and their families to national parks by using exciting media and technology.

Increase the number of web hits through the introduction of advanced, interactive features that attract young people to national parks.

- Develop MP3 files for self guided interpretation of the Discovery Tour and selected surface trails, and post to park webpage
- Develop GPS "geocache trail" on the surface in the park headquarters developed area, tracing the subterranean route of the Historic Cave Tour. Post on park web page for use by young people and families. Certain waypoints can be linked with a MP3 file to provide interpretation of specific subterranean features.
- Develop MP3 files for each wayside exhibit in the park to provide audio accessibility for the visually impaired.
- Explore the feasibility of using private cell phones to provide a self-guided experience within the Discovery Cave Tour using repeater technologies.

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Site: MACA

EDUCATION

Promote life-long learning to connect generations through park experiences.

Enroll an additional two million children in the Junior Ranger program.

• Revise and upgrade the Junior Ranger program and provide booklets free of charge utilizing cooperative association donation account or 80% fee account.

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Other Park/ Program performance goal(s)

• Provide a fully accessible cave tour experience.

• Complete planning, fabrication, and installation of 4,400 square feet of universally accessible interpretive exhibits in renovated Visitor Center with particular attention paid to engaging multiple age levels and learning styles.

• Expanded the existing Elderhostel program to two groups per year, and develop and promote an intergeneration Elderhostel program in association with partner group(s).

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Site: MACA

EDUCATION

Impart to every American a sense of their citizen ownership of their national parks.

Increase visitors' satisfaction, understanding, and appreciation of the parks they visit.

- Secure base funding for the Director and Education Director positions for the Mammoth Cave International Center for Science and Learning, so that Center programs may continue to be developed and implemented. These programs will be dedicated to education, research, and dissemination of information related to the Mammoth Cave National Park resources.
- Initiate citizen science programs to enlist the aid of local constituents in the collection and analysis of research data needed for the wise management of the park's resources through the Mammoth Cave International Center for Science and Learning.
- Communicate the diversity of communities contributing to Mammoth Cave's history through their inclusion and prominent display in the planned Visitor Center exhibit. Involve local residents in this process, and include consultation with Federally recognized tribes.
- Provide foreign language options in the audio media developed for the Visitor Center exhibit.
- Develop MP3 self-guided trail files for Spanish speakers.

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Site: MACA

PROFESSIONALISM

Be one of the top 10 places to work in America.

Meet 100 percent of diversity recruitment goals by employing people who reflect the face of America.

Demonstrate all-employee knowledge of and commitment to meeting diversity goals, through a variety of activities and programs.

- Develop and present local training to ensure all employees are aware of NPS and park goals regarding diversity recruitment, as well as announcements to fill vacant positions.
- Empower and encourage all employees to recruit for vacant park positions through word of mouth, social contacts, school groups, etc.
- Continue to partner and participate in park-related activities with groups and organizations (e.g., Job Corps, area Historically Black Colleges and Universities) to bring potential diversity candidates into the park, and orient them to NPS and park missions and activities.
- Continue to focus park recruitment efforts on individuals, groups and organizations likely to provide diversity candidates.

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Attain the highest employee satisfaction rate of all federal agencies, as measured by Office of Personnel Management surveys.

Identify primary elements of Office of Personnel Management employee satisfaction survey(s), and will develop programs and activities to ensure that these elements are addressed with respect to park staff. These programs and activities may include formal training sessions, listening sessions, in-house surveys, guest speakers, question-and-answer sessions, and even leisure time activities.

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Site: MACA

PROFESSIONALISM

Use strategic planning to promote management excellence.

Establish a structured professional development curriculum to provide park managers with the skills to apply best business practices and superior leadership.

Devise and participate in coordinated efforts at the park, with other field locations, and Servicewide, to develop and retain future leaders who will serve as competent and motivated managers. Encourage staff participation in a variety of professional development programs and activities at all levels; and encourage those with leadership potential to pursue career paths that will provide the greatest opportunity for advancement into positions of management responsibility.

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Site: MACA

PROFESSIONALISM

Promote a safety and health culture for all employees and visitors.

Reduce the number of employee lost-time incidents and serious visitor injuries by 20 percent.

Commit to elimination of employee accidents and lost time injuries, as well as visitor accidents. Participation of all employees in the development, promotion and implementation of the park safety and health management program; regular audits and inspections of employee and visitor facilities; safety training for all personnel; delegation of responsibility to all staff members for ensuring safe practices are used at all times; and programs to reward consistently safe work records will be used to meet this goal.

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Site: MACA

PROFESSIONALISM

- Make national parks the first choice in philanthropic giving among those concerned about environmental, cultural, and recreational values.**

- Improve communications and marketing capacity to increase public understanding of our mission, opportunities, and benefits.**

Establish new relationships, and expand and strengthen existing relationships with local and regional organizations whose stated purpose will help us in furthering this goal. These organizations include the Barren River Area Development District, the Caveland Marketing Association, Southeast Tourism Society, various local Chambers of Commerce, Friends of Mammoth Cave National Park, and Kentucky Federal Agency Tourism Council. Develop new and more creative methods of utilizing these organizations' resources, combined with our own.

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