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National Parks

THE MAGAZINE OF THE NATIONAL PARKS CONSERVATION ASSOCIATION

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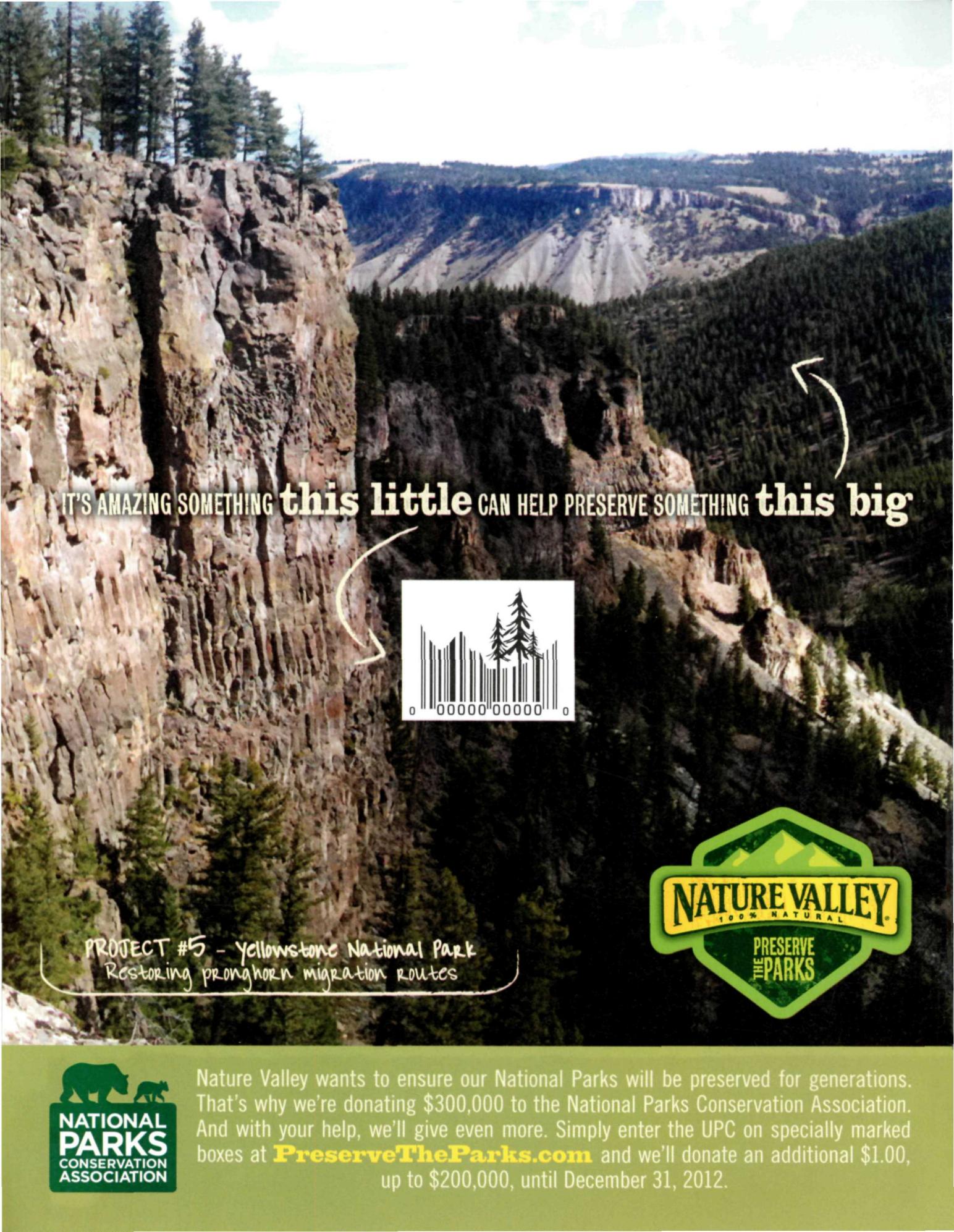
Visit Gulf Islands and
Canaveral National Seashores

A photograph of a woman sitting by a campfire at night, roasting marshmallows on a stick. She is wearing a dark jacket and red mittens. The fire is bright and orange, illuminating her face and hands. The background is dark, suggesting a nighttime outdoor setting.

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National Parks

FALL 2012 / Vol. 86 No. 4

COVER IMAGE:

SUSAN MARENO (LEFT)

AND MEGGAN HALLER

roast marshmallows while
backcountry camping at
Perdido Key in Gulf Islands
National Seashore, Florida.

©JEFF HALLER/KEYHOLE PHOTO

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A GHOST CRAB hunkers
down in the sand at
Canaveral National Seashore.

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Standing Guard

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over Sequoia and Yellowstone
in the parks' earliest days—
the Buffalo Soldiers.

By Kate Siber

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are going back to a simpler
approach, and that's a huge
step forward for the parks
of the Chesapeake Bay.

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Coast to Coast

Take a trip to Gulf Islands and
Canaveral National Seashores
for a little history mixed in
with the sun and the sand.

By Mark Schrope

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ON THE WEB

Get stunning photos and fun facts from a new national park each month. Sign up for Park Lines, NPCA's electronic newsletter at npca.org/join.



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President's Outlook



© IAN SHIVE

The People Have Spoken

Americans consider our national parks some of the most majestic, beautiful, and awe-inspiring places in the world, and yet only 6 percent think the national parks are in good shape today, according to a poll commissioned by NPCA and the National Park Hospitality Association.

A whopping 95 percent feel it is appropriate for the federal government to protect and support our national parks. It's no surprise that a majority of Americans want to see the government do more to protect America's most treasured places. What may be surprising given these difficult fiscal times is the fact that very few voters from either political party say the federal government should be cutting back on park funding.

The new poll offers important information as the Administration and Congress consider additional cuts to national parks through the annual appropriations process and the looming across-the-board cut known as a "sequestration," scheduled for January 2013. Under the sequester, the Park Service would face cuts between 8 and 10 percent that would dramatically reduce the number of park rangers and close visitor centers, campgrounds, and some national park sites. National parks embody the American experience, and voters want to see them cared for, not left to crumble into disrepair.

Through your generous financial support, NPCA carries this message to elected officials and decision makers—calling for them to ensure our beloved treasures are well-funded, restored, and ready to serve the public. With the success of our capital campaign, *Renewing Our Promise: The Second Century Campaign for the National Parks*, we've amplified our voice to protect our national parks from the challenges facing them now and in the coming century.

At this writing, NPCA needs to raise \$3 million in donations and pledges to reach the \$125 million campaign goal before December 31. We hope you are in a position to consider making a special gift to NPCA and help bring the campaign to a successful conclusion. (See special insert on page 29 to learn more.) Whatever your contribution, it will be a gift that will generate results that endure long past our lifetime.

Thomas C. Kiernan



Editor's Note



© DAVID HARP

WHAT DO FARMERS AND KAYAKERS have in common?

Back at the Ranch

Every time I fly over the middle of the country on my way to, say, a national park, I am reminded that the land is dominated by acres and acres of farms—nearly every flat surface seems to be covered in a patchwork quilt of green, brown, and golden hues. But each year more of those farms are operated by corporations, and fewer by individual farmers and their families. According to the Piedmont Environmental Council, which supports local farming in Virginia, the U.S. has lost 4.7 million farms since 1935, and four large firms now control production of nearly all the beef that ends up on our plates. With the shrinking ownership of those farms often come “advancements.” Cows are put in feed yards to conserve space, fed grain (rather than grass), and given antibiotics to stave off diseases that generally come with this newfound “efficiency.”

We don't generally consider national parks part of that equation. Melanie Kaplan's article “Back to the Land,” beginning on page 36, reminds us that we should. Because all of that animal waste, all those pesticides, and all of those antibiotics have to go somewhere, and “somewhere” usually means our waterways, including the Chesapeake Bay. Thankfully, farmers like Terry Ingram are returning to the approaches embraced years ago. They're letting cows roam through pasture, where they eat grass and produce the most natural fertilizer there is, and they're erecting fences to preserve the health of nearby rivers and streams. Those efforts don't just make for healthier cows and a better glass of milk—they make for healthier parks, too.

Scott Kirkwood
NPMAG@NPCA.ORG

National Parks

EDITOR IN CHIEF: Scott Kirkwood

ASSOCIATE EDITOR: Amy Leinbach Marquis

PRODUCTION MANAGER/DESIGNER: Annie Riker

PHOTO EDITOR: Nicole Yin

FEATURES DESIGN CONSULTANT: Bates Creative Group

NATIONAL PARKS

777 6th Street NW, Suite 700, Washington, DC 20001-3723

202.223.6722; npmag@npca.org

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WHO WE ARE

Established in 1919, the National Parks Conservation Association is America's only private, nonprofit advocacy organization dedicated solely to protecting, preserving, and enhancing the U.S. National Park System.

WHAT WE DO

NPCA protects and enhances America's national parks for present and future generations by identifying problems and generating support to resolve them.

EDITORIAL MISSION

National Parks magazine fosters an appreciation of the natural and historic treasures found in the parks, educates readers about the need to preserve those resources, and illustrates how member contributions drive our organization's park-protection efforts. The magazine uses the power of imagery and language to forge a lasting bond between NPCA and its members, while inspiring new readers to join the cause. *National Parks* magazine is among a member's chief benefits. Of the \$25 membership dues, \$6 covers a one-year subscription to the magazine.

MAKE A DIFFERENCE

Members can help defend America's natural and cultural heritage. Activists alert Congress and the administration to park threats; comment on park planning and adjacent land-use decisions; assist NPCA in developing partnerships; and educate the public and the media. Please sign up to receive Park Lines, our monthly e-mail newsletter. Go to npca.org to sign up.

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Letters

FINDERS KEEPERS

The art of Richard Lang and Judith Selby Lang (“Found Objects”) is such a lovely concept! This was an amazing and inspiring article and video. What wonderful people, to have this vision and share the possibilities of the reuse of what some may call trash. My mother, who grew up during the Depression, taught us not to throw away anything that could be reused. She reminded us how her family saved tin foil, twine, and flash bulbs, which they painted with Russian folk designs and used as Christmas tree ornaments. Thank you for these memories. What a wonderful refresher and reminder to open one’s eyes and envision the possibilities of all that surrounds us.

“AUNT BETTY”

via npca.org

The Langs reinforce the idea that beauty can be found in the most unlikely of shapes, forms, and places. You only have to open your eyes to appreciate its message.

“LATUNA7”

via npca.org

Thank you for this video and the article in your magazine—very inspiring on many levels. Please keep up your art-related articles. We really enjoyed the art from the Japanese internment camps (“The Art of Gaman,” Fall 2011), too!

ANONYMOUS

via npca.org

A SLIPPERY SLOPE

As a new subscriber to *National Parks*, I was surprised and delighted to find John Grossman’s article, (“Slip Sliding Away,” Denizens) in the Summer edition of the magazine. The role played by the American eel and the eastern elliptio freshwater mussels in keeping the Delaware River

healthy and clean is one of the most fascinating balance-of-nature stories I’ve ever come across. This article was particularly illuminating because my wife and I recently spent a delightful summer weekend swimming and rafting on the Upper Delaware Scenic and Recreational River. While immersed in the river you can’t help but notice the rocky riverbed, which, as I learned from the article, is prime eel habitat. What a tragedy it would be if hydraulic fracturing and its attendant ground disturbance lead to a habitat-destroying siltation—driving away the all-important eel and mussel population. The Upper Delaware River is a mesmerizing natural resource; here’s hoping that fracking concerns don’t compromise it for future generations.

PAUL CLARKE

Tarrytown, NY

I just finished reading the Summer issue of *National Parks* and as usual, I enjoyed



the variety of stories, especially “Slip Sliding Away.” Living in New Jersey, I am very familiar with this river and have taken many motor trips up to the Delaware Water Gap, where the scenery is wonderful. I am deeply opposed to the fracking that is being considered. I don’t think we need to access some natural gas at the expense of possibly losing a national treasure such as the Delaware River.

FRAN CONSORTI

Toms River, NJ

We couldn’t agree more. Last year, NPCA joined the Delaware Riverkeeper Network and the Hudson Riverkeeper to file a lawsuit against the Army Corps of Engineers and the Delaware River Basin Commission for proposing gas drilling regulations without first conducting a full environmental review as required under the National Environmental Policy Act. The Columbia Environmental Law Clinic, which is representing NPCA, presented its arguments

to the court in July. Learn more and get updates at www.npca.org/DEWAfracking.

—Editors.

PARADISE FOUND

Thank you so much for your recent article "Exiled to Paradise." It is truly a spiritual experience to visit Kalaupapa National Historical Park and see where a humble Catholic priest, assisted by Protestant, Evangelical, and Mormon missionaries, shined humanity's brightest lights. In January 2009, our first attempt to visit Kalaupapa by hiking three miles down the Kalaupapa Trail from "Topside Molokai" was defeated by a combination of rain, mud, and disintegrating trail. However, a subsequent trip via a charter flight tour in December 2009 was exceptionally successful. Kalaupapa is one of the must-see places in the world. I also recommend that NPCA support work by the National Park Service to restore and maintain the Kalau-papa Trail, an incomparable 1,600-foot descent that provides the most appropriate access to "paradise."

SIGURD M. SORENSEN, JR.
Idaho Falls, ID

Send letters to National Parks Magazine, 777 6th Street NW, Suite 700, Washington, DC 20001-3723. Or e-mail npmag@npca.org. Include your name, city, and state. Published letters may be edited for length and clarity.

Join the conversation.

Weigh in on magazine articles by sharing your thoughts at npca.org/magazine, and be part of the discussion at NPCA's blog, parkadvocate.org.

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Rewarding a technology that is going backward and getting dirtier is the very opposite of stewardship that Americans expect and deserve in Yellowstone National Park.

Tom Kiernan, NPCA's president, quoted by Environment & Energy Daily, in response to a report that snowmobiles with the "best-available technology" still cause 50 times the pollution of snowcoaches on a per-visitor basis, undermining the Park Service's proposal to increase the daily cap on snowmobiles and maintain current technology standards through winter 2017.

People here are passionate about water. [This project] doesn't save a drop for future generations.

Seth Shteir, NPCA's California Desert Field Representative, quoted by the Hi-Desert Star regarding a proposal to pump desert groundwater and transport it to California coastal communities. The project would deplete desert aquifers, harm air quality, and threaten the springs of Mojave National Preserve.

The beaches will be filled. It will be one of the city's—probably one of the nation's—greatest campgrounds.

Alexander Brash, senior director of NPCA's Northeast regional office, on WFUV-FM in New York City, discussing an ambitious partnership between the city and the federal government that will revitalize 10,000 acres of Gateway National Park in and around Jamaica Bay.





A PROMISE BROKEN

Ever since 1964, the Land and Water Conservation Fund (LWCF) has set aside a percentage of revenues from offshore oil and gas drilling to purchase privately owned land for city parks, state parks, and

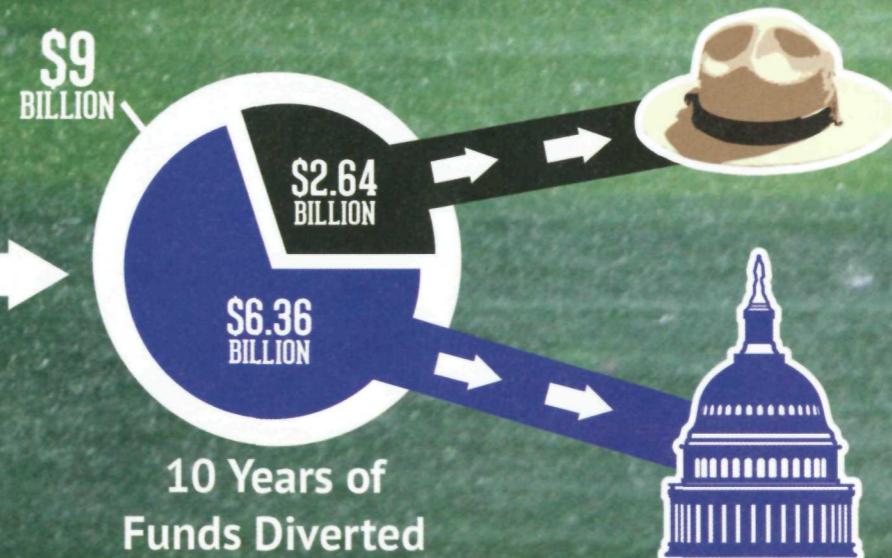
national parks. But too often Congress siphons off most of the money for other purposes. As a result, NPCA is left to fend off development proposals inside parks like Grand Teton and Zion, while pushing Congress to follow through on its promise. Below, a look at some of the key figures.



Offshore Oil Drilling



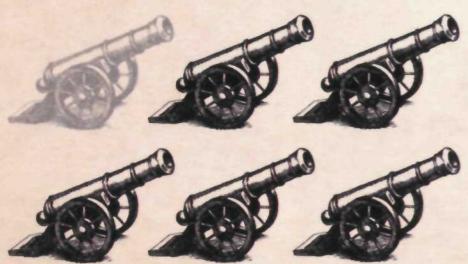
Annual Funding Potential



State & Federal Land Purchases

U.S. Congress

MEMORY LOSS



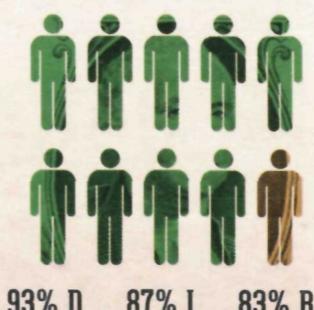
1 of every 6 acres within Gettysburg National Military Park is privately owned.

ROOM TO ROAM



Why is it important to conserve swaths of land for conservation? The home range of a North American grizzly bear is up to 457 sq miles. That's a box roughly 21 miles on each side.

A POPULAR MOVE



New polls indicate that **88% of Americans** support the use of LWCF funds to preserve our national parks, forests, and open spaces.

A SMART INVESTMENT



Last year, visitors to national park units contributed more than **\$31 billion** to local economies and supported **258,000 jobs**.



Rebuilding the Past

The National Park Service is finding new ways to preserve historic buildings that would otherwise crumble into disrepair.

The John Moulton Barn in Grand Teton National Park may be the most photographed barn in the world—with good reason. It sits in a sprawling meadow with unhindered views of the Tetons' craggy tips. Although thousands of visitors appreciate the barn and the line of pioneer homes in nearby Mormon Row, few realize that many of the most recognizable buildings in national parks, such as these, are endangered.

Several years ago, the Chambers residence, one of the most beautiful old cabins on Mormon Row, had cracked windows, rotting window frames, decomposing logs, and foundation problems. Though the park was short on maintenance funds—a familiar story across the country—park staffers devised a creative solution. They enlisted the help of the nonprofit organization, HistoriCorps, which has now spent three years organizing volunteers for historic preservation projects on public lands.

The park provided funds to purchase materials, and HistoriCorps provided volunteer labor. Over three days, the crew shaped nine logs, hewed notches, restored the windows, lifted the building with 20-ton jacks, repaired the foundation, reset stones, installed gravel to prevent frost-heave damage (a result of the ground freezing and thawing repeatedly), and



AARON MCCORMICK/COLAGENE

graded the site. But it wasn't all work. In the evenings, they sat around a campfire, enjoyed hot meals prepared by the volunteer cook, and gazed at the Tetons, floodlit by the moon. The volunteers went home with memories of an iconic American landscape, and the Chambers residence is now bolstered to withstand the tough Wyoming elements—and thousands of camera-toting admirers.

The Chambers residence is just one example of how the National Park Service is finding creative ways to maintain its historic buildings. According to the agency, there are some 9,600 historic build-

ings in the National Park System, and maintaining all of them would require \$3 billion the agency simply doesn't have.

The structures include sites like the Kennecott Mine in Wrangell-St. Elias National Park & Preserve, artists' dune shacks in Cape Cod National Seashore, and railroad hotels like Yellowstone's Old Faithful Inn. Many represent an important passage in American history and, without maintenance, are falling into irreversible disrepair.

"Some of these structures have been torn down or allowed to disintegrate," says Dan Saxton, senior program



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Cape Hatteras National Seashore



coordinator for NPCA's Center for Park Research. "With them goes the history of earlier settlers and early land uses before the park was established. These buildings help the stories of the parks come alive."

In the past, Park Service staffers have been too overwhelmed by the maintenance backlog to devise comprehensive strategies for tackling it. But that's starting to change. In fact, Saxton and his colleagues in Fort Collins, Colorado, are compiling a handbook to highlight creative ways the Park Service can bridge the maintenance gap, and that includes work the agency is already doing.

In 2005, the National Park Service and National Trust for Historic Preservation broke ground on the Western Center for Historic Preservation, in Moose, Wyoming. In 2006, a preservation shop and office facility opened up for year-round carpentry and administrative work. The White Grass Dude Ranch, which is being rehabilitated, will provide training in historic preservation techniques for maintenance employees of Western national parks. It is slated to open in 2016.

The founding of the center marked a turning point in the agency's approach

HistoriCorps is always looking for volunteer builders and volunteer cooks for its historic preservation projects in national parks. The only requirement is enthusiasm. HistoriCorps provides materials, tools, instruction, meals, and campsites. Sign up at historicorps.org.

Volunteers learn valuable job skills, such as log-cabin construction or window restoration, and often they emerge with a memorable experience.

toward historic preservation. In the past, historic structures in parks that were established for their natural resources, such as Grand Teton, Yellowstone, and Denali, were often overlooked. Now, parks increasingly see these cultural assets as enhancements to visitor experience, and park employees are more committed to maintaining them. The trick, however, is figuring out how to bridge the funding gap.

In some cases, the Park Service collaborates with organizations like HistoriCorps, Student Conservation Association, and Youth Conservation Corps, which can provide volunteers and occasionally some historic preservation experience. In return, volunteers learn valuable job skills, such as log-cabin construction or window restoration, and often they emerge with a memorable experience.

"Invariably volunteers come back saying that this has been an incredible experience," says Townsend "Towny" Anderson, technical director for HistoriCorps. "They take skills back to their communities, and they become advocates for historic preservation."

Other times, public-private partnerships help raise both money and volunteer enthusiasm for restoration projects. In one of the first, about ten years ago, the National Trust for Historic Preservation raised \$800,000 and organized volunteers to help rehabilitate the historic Mc-Graw Ranch in Rocky Mountain National

Park. Now, the ranch is the Continental Divide Research Learning Center, an invaluable learning institution in the park.

The Park Service sees a number of purposes for restored structures, from storefronts for concessioners to housing for researchers, maintenance buildings, and even visitor centers. A series of historic homes in Delaware Water Gap National Recreation Area is now being used as artist housing, studios, and retail space at the Peters Valley Craft Center, which occupies the buildings for free in exchange for performing regular maintenance. In Acadia National Park, a private donation helped the Park Service transform a building on a U.S. naval base into a research and education center. And there are more on the way: HistoriCorps' upcoming projects alone include rehabilitating historic log cabins in Arches National Park, a corral in Great Sand Dunes, and a patrol station in Grand Teton.

"Historic properties in the parks are vestiges of the past," says Katherine Longfield, cultural resources specialist at Grand Teton National Park. "They teach us about where we came from and the people who lived here before. How do you know where you're going as a community if you don't know where you came from?" These historic buildings help us remember.

— KATE SIBER

Alaska

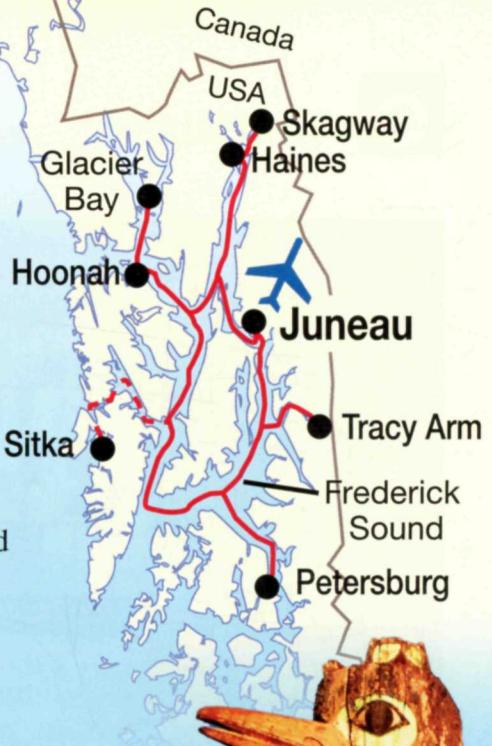
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SANTA MONICA MOUNTAINS volunteer Mara Somma (right) and employee Kate Kuykendall look over one of the parks' new branded maps at the inter-agency visitor center.

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A Mountain to Climb

In Los Angeles, California, the parks of Santa Monica Mountains unite beneath a single banner.

The Santa Monica Mountains are one of Hollywood's most visible backdrops in more ways than one. Sprawling through Los Angeles and Ventura Counties—a stone's throw away from many major studios—the landscape has made appearances in the *Andy Griffith Show*, *Bonanza*, and *Lassie*. It stood in for Korea during the filming of *M*A*S*H* and, more recently, welcomed film crews from *Weeds* and *True Blood*. That commercial with a brand new car zooming by ocean scenery? Odds are it was shot on a winding segment of the Pacific Coast Highway in the very same mountain range.

Despite all the screen time the Santa Monica Mountains have gotten, many L.A. residents are unaware that the coun-

try's biggest urban park unit is in their backyard—part of a network of parks managed by the Park Service, California State Parks, the Santa Monica Mountains Conservancy, and a local agency called the Mountains Recreation and Conservation Authority (MRCA).

"When I told people I moved here for a job with the National Park Service, they all gave me these funny looks," says Kate Kuykendall, public affairs officer at Santa Monica Mountains National Recreation Area. "When I'd ask them a few questions, they'd say, 'Oh yeah, I mountain bike in Cheesboro Canyon every weekend,' and I'd say, 'Yep, that's Park Service land.' Even frequent visitors fail to make the connection,

NPCA@WORK

NPACA's Center for Park Management (CPM) was actively engaged in the entire process of re-branding the Santa Monica Mountains and crafting ways to attract new park audiences, a part of its broader partnership to help the Park Service engage local stakeholders, develop strong leaders, and use data to make more informed decisions. CPM's staff of 17 are also equipping NPS employees with the skills and tools to build a more engaged and diverse workforce that reflects the nation's growing diversity.





SANTA MONICA MOUNTAINS

THE SANTA MONICA MOUNTAINS contain a diverse network of parks, so the parks' new logo emphasizes land, sea, plant, and wildlife elements with a colorful palette to break through the visual noise of downtown Los Angeles.

because there are so many different agencies, and people don't realize it's all part of a whole."

"Members of the public don't really care whose uniform you're wearing or who manages the land," says Amy Lethbridge, deputy executive officer for MRCA. And why should they? They just want to know how to get to the beach, as Lethbridge points out. But in a way, it *does* matter. Because at a time when budgets are being slashed at every level of government, people need to know that their tax dollars are keeping those trails, beaches, and visitor centers open.

"Our acting superintendent is fond of saying that the parks belong to the people," says Kuykendall. "Everyone is a part owner, so it's only fair and right that people have equal access to the park and an understanding of [all the experiences available to them]. We know the key to our parks' survival rests with younger and more diverse audiences—that's where the demographics are headed—so we need to engage those groups and help them become great stewards in the future."

To that end, all the park agencies agreed to come together to deliver their

gospel with a chorus of voices rather than singing alone. But how do you capture the attention of 10 million people in a city where massive billboards advertise blockbuster movies on every corner?

First you reach out to your target audience. With funding from the S.D. Bechtel, Jr. Foundation, Geoff Kish and others within NPCA's Center for Park Management set out to talk to members of six key groups: young people, Latinos, urban families that don't visit the park, affluent visitors, tourists, and park neighbors. Researchers walked right up to park visitors and city dwellers and had conversations about the sort of recreational experiences they enjoyed, and found out what they already knew about the park.

That research confirmed some of the agencies' own thinking, but it also revealed that members of some groups feared mountain lions and rattlesnakes lurking at every turn. Others were frus-

trated when, 20 minutes into a hike, they discovered that some trails allow dogs but others don't; the differing policies left dog owners stumbling into one dead end after another.

Next came the outreach. Several agencies were already hosting events that attracted hundreds of students from L.A. who had never set foot in a national park, so they turned those events into marketing opportunities. Kids went on hikes, learned about urban wildlife, and heard park rangers explain that the park was a really safe place to be, as long as they followed a few guidelines. Before the kids left, they were given a list of future events, including opportunities that were much closer to their homes, and they were told to invite their parents, too.

In June, the land-management agencies opened a visitor center staffed by employees from all four groups. An old horse stable formed the bones of the structure, which was retrofitted to LEED platinum specifications per the U.S. Green Building Council, thanks to stimulus funds from the American Recovery and Reinvestment Act. A colorful new logo was also unveiled, to tie the parks together under one symbol. It's now plastered on everything from T-shirts and coffee mugs to sunscreen and lip balm, and, of course, employees' polo shirts. Early next year, the parks will open an outreach office in Chinatown to connect downtown residents with recreational opportunities in

How do you capture the attention of 10 million people in a city where massive billboards advertise blockbuster movies on every corner?



Trail Mix

all of the parks.

And what about those frustrated dog owners? In the long term, the parks hope to come up with more consistent policies, but for now, the information just needs to be communicated more clearly. The new visitor center features touch-screen trip planners that tailor routes and activities for dog owners, parents of small children, and even bird watchers; web versions of similar tools are in the works.

NPCA and the Park Service hope this is just the beginning. The goal is to take everything learned in the Santa Monica Mountains and apply that experience to

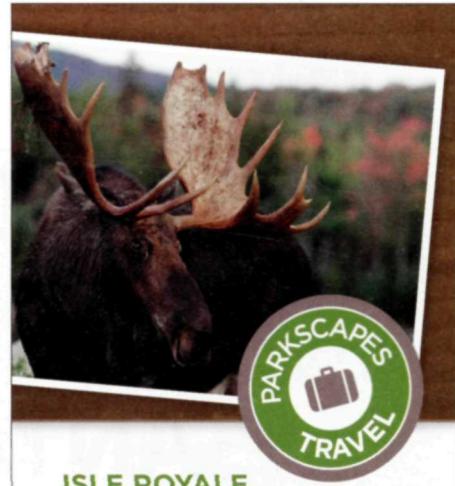
other urban parks. Next up: Cuyahoga Valley National Park, an oasis sandwiched between Cleveland and Akron, Ohio.

It's early still, but so far the Los Angeles outreach seems to be making an impact.

"My fantasy is that years from now, if you ask anyone in L.A., 'What's so great about this city?' one of the things they'll say is, 'We have this great mountain chain with all these amazing parks,'" says Lethbridge. "They won't say we have a national park or a state park, just, 'We have the Santa Monica Mountains, and we go there all the time.' "

— SCOTT KIRKWOOD

A MAP OF THE LOS ANGELES REGION shows the patchwork quilt of parks that make up the Santa Monica Mountains, illustrating the potential confusion facing visitors.



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PARK SERVICE STAFF in the Smokies work closely with Appalachian Bear Rescue to ensure the protection of the park's iconic species, the black bear.

Saving The Smokies' Bears

A bear-rescue group in Tennessee gives nature a little help.

In May, when park rangers at Great Smoky Mountains National Park received a call about a bear that had wandered into the Cades Cove Campground, they weren't surprised.

Faced with food shortages due to extreme weather conditions, the bears were "coming out of hibernation and moving all over the place trying to find food," recalls Bill Stiver, the park's chief wildlife biologist. Although park staff generally let nature take its course, when bears start showing up in a developed area they have no choice but to take action. So a wildlife technician captured the black bear—easy enough, since she was weak and had suffered a severe bite to the snout, possibly from a coyote or another bear. At the University of Tennessee Veterinary Hospital,

doctors cleaned the wound and administered antibiotics.

Hydrated and treated, the woefully undernourished yearling, which weighed in at only 13 pounds, was taken to Appalachian Bear Rescue (ABR) in Townsend, Tennessee, a gateway town about three miles from the park. There, she was kept inside to gain weight and allow her wound to heal, free from dust and insects she'd encounter in the wild. In three weeks, she was well enough to move to an outdoor enclosure. In three more weeks, she had put on 20 pounds (approaching the typical weight of 40 to 50 pounds for a female yearling) and was ready to stand on her own. In late June, the bear was tagged and released back into the park. She took off

GOING NUTS FOR BEARS

As part of its education program, Appalachian Bear Rescue organizes groups of school children who forage for acorns and then donate the yield—truckloads' worth—to the facility. The rescue group also maintains a very strong volunteer base from around the region and even in Toronto, where a tech-oriented volunteer updates its donor database and administers its Facebook page.





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Ninety percent of the 185 orphaned and injured bears that have stayed over the years have been fattened up, treated, and released to the wild.

in about five seconds.

The story of Little Bit Bear—as she was subsequently named by Appalachian Bear Rescue's 7,000 Facebook fans—is the latest in a string of successes since the facility opened in 1996. “Before ABR existed, we had a mast failure [a dire shortage of nuts and berries that accumulate on the forest floor],” says Stiver. “We were holding hungry and injured cubs in wild boar traps—essentially small cages—until the bears gained enough weight and strength to return to the wild. Getting ABR up and running as a separate facility was tremendously important to the park. Our local friends group, Friends of the Smokies, even helped build their fences.”

Studded with a thick canopy of tulip poplars, oaks, and maples, ABR’s 25-acre facility includes a cub nursery, three sheds used for food storage and refrigeration, and two fenced-in outdoor “blind” enclosures that prevent the bears from seeing their keepers.

Officially under the auspices of the

Tennessee Wildlife Resources Agency, the organization receives about 20 percent of its bears from the Smokies; the rest come from state parks or even neighbors’ backyards. ABR is the only bear-rescue group near a national park.

The cubs and yearlings that arrive at the facility are “just about starving to death,” says ABR’s co-founder Rick Noseworthy. “They’re at the point where they won’t be able to survive much longer in the wild.” But most just need a little help. Ninety percent of the 185 orphaned and injured bears that have stayed over the years have been fattened up, treated, and released to the wild. The others have died, been euthanized, or placed in captivity because they’ve become too habituated. “A bear that grows used to people is very quickly a dead one,” says Dana Dodd, board president of ABR. “[Once an animal becomes a nuisance], it’s always the bear that loses.”

To prevent that, visitors aren’t allowed at the rescue center, and curators

keep as far away as possible when feeding and handling the bears. Even when ABR sends educators to schools and community groups—about two dozen times a year—the bears stay put. The need to ensure distance between bear and man can hamper fundraising, but it’s not in the animals’ best interest to be around people, says Dodd. “I could make a mint if I was able to bring a cuddly cub with me,” she laughs.

As intakes have increased, the organization has boosted its physical size and added a second curator. Its food costs are skyrocketing, too. Black bears feast on berries, acorns, and other nuts, and they can devour 20,000 calories a day in preparation for hibernation. With a record number of 35 bears on site this spring, the group’s food bill reached \$8,000 each month.

With some recent capital improvements behind her, Dodd is turning her attention to blue sky dreams. “I’d really love to have a site in town where people can learn more about black bears,” she says. “Perhaps we could even have a live web-cam feed. We’re located right outside of the most visited national park in the country—and everyone comes for the black bears. They’re the icons of the park.”

— JOANN GRECO

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MANGROVES COULD HELP THWART

the impacts of rising sea levels in the Everglades, but ultimately the canals and levees that disrupt water flow must be removed.

sanctuary of freshwater shallows and sawgrass, has shrunk to half its original size. Canals and levees, dug years ago to spur urban and agricultural growth, have drained thousands of acres of wetlands.

Now, as a result of climate change, rising seas are reconfiguring shorelines and pushing saltwater tides deeper into the park. Sea level around Key West has risen eight inches over the last century, and a regional working group is predicting another nine to 24 inches of rise in just the next 50 years, based on numbers from the U.S. Army Corps of Engineers.

Considering that 60 percent of the park lies less than three feet above sea level, rising tides could make the famed "River of Grass" a thing of the past. It could cause the inland migration of plants and animals, increase storm surges, and damage the park's pine rocklands, a unique forest ecosystem boasting colorful flowers and plants. Rising seas also could inundate park buildings and wash away trails and campgrounds, destroy ancient Indian sites, and—perhaps most worrisome to residents—cause saltwater to intrude on the Biscayne Aquifer, the main source of drinking water for nearly 5 million people.

In some ways, the fate of these resources rests on the shoulders of an unlikely subject: a tree. Everglades National Park contains the largest contiguous stand of protected mangrove forest in the Northern Hemisphere, which provides foraging, nesting, and nursery grounds for manatees, crocodiles, herons, and a colorful array of fish. But they also have the vital job of separating the fresh water from Florida Bay, using a unique root structure to filter pollution, slow erosion, and trap sediment, thus creating a low, broad dike that protects against the advancing sea.

Sea Change

Everglades National Park hopes to alter the tide of climate change and, perhaps, the future of park planning.

SIXTY-FIVE YEARS AGO, environmentalist Marjory Stoneman Douglas prophesied in her classic book, *The Everglades: River of Grass*, that urban development and water diversion would dry out the land so much that the area would eventually erupt in flames. Her rightful concern may have prevented her from seeing the next threat that lay ahead—that seawater, not fire, might ultimately pose the greatest danger to this sensitive ecosystem.

Encompassing roughly 1.5 million acres, Everglades is the third largest national park in the lower 48 states. It's also one of the most endangered. Over the past hundred years, the Greater Everglades, once a vast

How will the mangroves adapt to the rising seas? That answer depends on a complex set of factors, including the type of mangrove and its root structure, but scientists estimate that a large-scale disturbance such as a hurricane coupled with sea-level rise could turn mangrove forests into a desolate expanse of cloudy water and muck.

"Hurricanes Katrina and Wilma reminded us of the vulnerability of the site," says Park Superintendent Dan Kimball. "Our number one priority is to restore the freshwater flows in the Everglades so the entire ecosystem is more resilient to the effects of climate change and rising seas." And they might just be able to achieve that, thanks to the state and federal governments' joint Comprehensive Everglades Restoration Plan, which is helping the park to remove

"Our number one priority is to restore the freshwater flows in the Everglades so the entire ecosystem is more resilient."

canals and levees that inhibit natural water movement and storage—a \$12.2 billion investment over 30 years. Returning natural flows of greater quantity and quality would provide a freshwater "wall" against advancing seas and help temper changes to the Everglades ecosystem.

The Park Service is also factoring climate-change projections into its planning and taking an adaptive approach to park management. Consider Hurricanes Katrina and Wilma, which struck in 2005 and destroyed nearly all of the facilities in the beloved Flamingo area of the park. "We could have abandoned the site and walked away," says park planner Fred Herling. "But we chose to see it as an opportunity to get more creative about [adapting to] coastal sites vulnerable to storms, climate change, and sea-level rise."

When redevelopment plans stalled due to budget concerns, NPCA's Sun Coast office launched a tireless campaign of surveys, sign-on letters, reports, and studies that illustrated not only the strong visitor interest in the area but the potential economic benefits of rebuilding Flamingo. "A recent Park Service report shows that for every federal dollar invested in our parks, ten dollars are generated," says Jacqueline Crucet, senior program coordinator in NPCA's Sun Coast office. "It's a great return on investment."

Actively participating in NPS planning efforts, NPCA also helped park staff dream up a new vision for Flamingo: Rather than rebuild and replicate old facilities, many constructed at grade, the park replaced fixed docks with floating ones, built new elevated housing for staff, and is considering seasonal eco-tents, mobile structures and elevated cottages that could be relocated to meet visitor needs. The result? A more sustainable national park that's less expensive to maintain and responds to change as readily as the ecosystem it protects.

In 2013, much of Flamingo's future will be spelled out. Near term, visitors can learn about climate change through park flyers. In addition, climate-change wayside exhibits are currently in development.

"My hope is people will come to the Everglades, fall in love with the park, and want to learn more about it," says Kimball. "The park is one big scientific platform that really tells the climate-change story."

"We have a great opportunity to educate millions of people in the decades ahead," adds Herling, who has been inspired by all the different organizations working together on this issue. "And NPCA has been a real champion in elevating the discussion." **NP**

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HIGHER GROUND

South Florida is home to more than 5 million people. According to Harold Wanless, a geologist at the University of Miami, the rise in sea level expected by the end of the century would put 56 percent of developed areas under water at high tide.

SOURCE: EARTHSKY.ORG

KEVIN GRANGE is a freelance writer in California. His first travel memoir, *Beneath Blossom Rain*, was published in April 2011.



The Secret Lives of Hummingbirds

Scientists and volunteers shed light on some of the most colorful and charismatic species in the national parks.

SPARKLING LIKE A DISCO BALL in the morning light of Mesa Verde National Park, the suspended globe of sugar water looks like an ordinary hummingbird feeder. Except this one has a net affixed to the top, and when a tiny aerialist lands on the perch, the woman standing nearby pulls a drawcord and—poof!—the bird is trapped within a soft, meshy balloon.

Netting birds is the first step in banding and tracking many songbirds and other bird species, but when biologists at Mesa Verde netted hummingbirds

MESA VERDE, BRYCE CANYON, AND BANDELIER all conduct research with the Hummingbird Monitoring Network.

by accident, they had to let them go. “We just weren’t prepared to deal with them,” explains George San Miguel, the park’s natural resource manager, who points out their toothpick-sized legs, which challenged many surveying programs. Enter the Hummingbird Monitoring Network, which has trained park staff and volunteers how to handle the fragile creatures and also introduced a standard banding protocol, allowing several national parks to study populations that had long gone untracked.

Hummingbirds should be the most scrutinized creatures on Earth. These flying aces swoop backwards, straight up and down, and even side to side at speeds of 30 miles per hour. They’re the only birds that truly hover, their tiny wings beating up to 220 times a second.

But migratory details about hummingbird populations still remain a mystery. In 2002, the Hummingbird Monitoring Network (HMN) started a coordinated program to track the birds’ comings and goings and better understand this continental phenomenon. By recruiting volunteers to execute the banding protocols developed by HMN scientists, the network kicked off the first-ever long-term coordinated inquiry into the lives and migrations of these birds—and it’s relying on national parks to help fill in the details.

In 2003, Chiricahua National Monument, Coronado National Memorial, and Tumacacori National Historical Park in Arizona partnered with the HMN to create monitoring sites that trap, band, and release hummingbirds from March to October; low populations and administrative issues led them to drop out. Today seven national parks conduct HMN projects, including Mesa Verde in Colorado, Bryce Canyon in Utah, and Bandelier and Capulin Volcano National Monuments in New

Mexico, which both joined the ranks this summer.

Park Service employees oversee the projects, but most of the work—from scrubbing and refilling bait stations to identifying each handled species—is done by volunteers. Every two weeks, a team arrives at dawn to begin its count. Some volunteers trap the birds while others identify the species, record fat levels and other indicators of overall health, note whether the bird carries an egg, and attach the tiny tracking band. “Our volunteers are motivated by the feeling that this program will yield some very interesting secrets about the hummingbirds of North America,” says San Miguel. Ideally, unveiling some of those secrets will help park managers understand the factors most critical to hummingbird conservation.

And that’s valuable information, as global warming threatens to push certain species out of their traditional hangouts. For example, rising temperatures may force broad-tailed hummingbirds into altitudes beyond Mesa Verde’s highest elevations (topping out at 8,640 feet), crowding them into a smaller land area and potentially exiling them from the park. Increasing development also may threaten hummingbirds by eliminating food sources and critical rest stops between their

In 2002, the Hummingbird Monitoring Network kicked off the first long-term inquiry into the lives and migrations of hummingbirds.

North American nesting grounds and winter homes in Mexico. By understanding where hummingbirds roam and what affects them along the way, land managers can make decisions that protect these species.

“It’s been a valuable partnership,” says Susan Wethington, a biologist who founded the Hummingbird Monitoring Network. Park units, she points out, are located in a variety of habitats and elevations that offer useful study sites. And compared with private properties, where changes in ownership can disrupt long-term studies, national parks offer the promise of sustained management.

“The longer the study, the more valuable it is,” says San Miguel, who bands hummingbirds himself. Periodic sampling “is just a snapshot,” he explains—the program can’t count and identify every bird that passes through the park. But by stitching those snapshots together over multiple years, biologists can discern patterns in hummingbird breeding, feeding, and migration habits. At Mesa Verde, for example,

some banded birds have returned five years in a row.

Bryce Canyon presents a smaller snapshot, because the numbers of hummingbirds there have been lower than expected, suggesting that this park may sit some distance from major migration paths. But even the absence of traffic adds to scientists’ understanding of hummingbird distribution and the forces affecting it.

The monitoring program also creates an opportunity for public outreach and ignites visitors’ imaginations. “Hummingbirds show a lot of personality,” says Bryce’s park biologist Sarah Haas. “The program links people’s interest in hummingbirds to more complex issues, like climate change.” By pairing scientific research with education and interpretation, parks help grow the number of hummingbird advocates and ensure that these tiny aerialists continue to thrive. **NP**

KELLY BASTONE is a freelance writer in Steamboat Springs, Colorado, where broad-tailed hummingbirds frequent her feeder.



TWO FOR ONE

In the Western United States, hummingbirds are the principal pollinator for 130 plant species. Scientists have observed evidence of “co-evolution” between certain plants and hummingbirds, suggesting that the birds’ beaks developed the ideal shape and length to reach the flowers’ nectar, while plants adapted their forms to allow the birds easier and more exclusive access.

A BLACK-CHINNED hummingbird is banded at Bryce Canyon.

NPS

STANDING GUARD

MEET AMERICA'S BUFFALO SOLDIERS SOME OF THE NATION'S FIRST PARK RANGERS.

By Kate Siber

ON A CLEAR FALL DAY IN CALIFORNIA IN 1903, a group of soldiers and civilians, both African American and Caucasian, gathered in Sequoia National Park. They ate fried chicken, ham and cheese sandwiches, and fresh fruit. They sipped beer and hot coffee and enjoyed the afternoon idyll in what is now one of America's most storied forests. At the time, it was a remarkably unusual sight.

The occasion for the picnic was the end of a season of hard work. In a summer, local engineers, construction workers, and two troops of Buffalo Soldiers—the Western frontier's first African-American servicemen—had accomplished what similar crews had taken three years to achieve. Together, they had built five miles of road and the first wagon route into the Giant Forest of Sequoia National Park. Today, the route still leads hundreds of thousands of visitors to some of the largest living organisms in the world.



A GROUP OF BUFFALO SOLDIERS on Minerva Terrace at Mammoth Hot Springs, Yellowstone National Park, August 1896, long before strict rules were put in place to keep visitors from damaging the geothermal features.

MONTANA STATE HISTORICAL SOCIETY PHOTOGRAPH ARCHIVES

**PORTRAIT OF A BUFFALO SOLDIER**

from the 25th infantry, Company A, circa 1886. **OPPOSITE:** Members of Troop D, 9th Cavalry, on the trunk of the Fallen Monarch, Mariposa Grove, Yosemite National Park, 1903 (**TOP**) and a view of Yosemite Valley (**BELLOW**).

But now that's all changing. In the last ten years, several researchers and Park Service staffers have unearthed photographs, muster rolls, and military reports that offer a window into this hidden corner of park history.

DISTINGUISHED SERVICE

African Americans fought for the country long before they were known as Buffalo Soldiers. In the late 1700s, about 7,000 black soldiers defended America in the Revolutionary War. In the Civil War, more than 180,000 donned the Union blue to fight for volunteer regiments. Finally, in 1866, Congress established six segregated regiments of enlisted African-American soldiers, which soon consolidated into four: the 24th and 25th Infantry and the 9th and 10th Cavalry.

The Buffalo Soldiers were soon sent to fight battles and keep order in a nation that was still growing and still defining itself. They patrolled the Western frontier, following all the same orders as white cavalrymen. They protected wagons and trains from outlaws, built telegraph lines, improved roads, escorted mail carriers, and fought in more than 125 conflicts with American Indians.

As the legend goes, during these skirmishes, Cheyenne and other Plains tribes gave the Buffalo Soldiers their name, inspired by their hair, which was curly and coarse like the matted cushion between a buffalo's horns, an animal central to their culture. Even now, the name is seen as a respectful reflection of the esteemed animal, known for its bravery and strength. Though the Buffalo Soldiers and American Indians were often pitted against each other in battle, many letters from Buffalo Soldiers reflect respect for the tribes and

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ON ASSIGNMENT IN SEQUOIA AND YOSEMITE NATIONAL PARKS FOR THREE SUMMERS—1899, 1903, AND 1904—THE BUFFALO SOLDIERS ACCOMPLISHED MANY OTHER THINGS, TOO. They chased away wild-game poachers and foiled sheep herders who illegally let their flocks graze in the park. They also constructed the first trail up 14,500-foot Mt. Whitney, the country's highest peak at the time, and built an arboretum with trails and benches, which is now considered the first museum in the National Park System.

These men were some of the first national park rangers, but soon after they left, their accomplishments in the parks were largely forgotten. It may be because their stints were short and there were few first-hand accounts of their work, but it's quite likely that prejudice played a role in erasing their legacy and the broader contributions of African Americans in settling the West.

The Buffalo Soldiers built the first wagon route into Sequoia's Giant Forest, chased away wild-game poachers, and constructed the first trail up Mt. Whitney.

ambivalence over fighting cultures that shared a similar history of oppression.

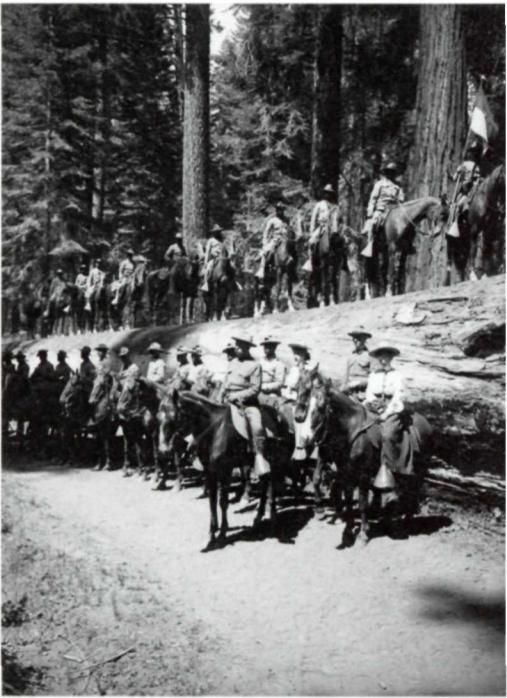
The Buffalo Soldiers also fought overseas. In the Spanish-American War, they stood next to Theodore Roosevelt and his volunteer "Rough Riders" in the Battle of San Juan Hill in Cuba in 1898. Some of the Buffalo Soldiers earned medals of honor, and a few rose to the ranks of officer. Their bravery and accomplishments in battle became sources of pride and hope for African Americans across the country; some

historians cite their service as the beginning of the Civil Rights Movement.

A SOURCE OF PRIDE

Although enlisting in the Army posed its own serious risks, it was one of the few places of opportunity for a strong, ambitious black man during a time when discrimination was rampant and lynching was appallingly common. (Only one woman ever served as a buffalo soldier: Cathy Williams was born a slave, posed as a man to

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AT THE TURN OF THE CENTURY, regiments of Buffalo Soldiers watched over Yosemite Valley (top, pictured in 1906) and rode the very first mountain bikes from Missoula to Yellowstone (bottom, pictured in 1897).



PILLSBURY PICTURE CO./LIBRARY OF CONGRESS S

COVERING GROUND

The Buffalo Soldiers were stationed at the Presidio, now part of the Golden Gate National Recreation Area, and at Yosemite and Sequoia National Parks. Visitors to any of these parks can learn about the soldiers' contributions; visitors to Yosemite can experience a presentation from park ranger Shelton Johnson. But the Buffalo Soldiers also visited lands that later became parks. They chased Mescaleros and mapped rugged mountains in what is now Texas's Guadalupe Mountains National Park. They drilled and marched at Vancouver Barracks, now part of Fort Vancouver National Historic Site, and they pedaled to Yellowstone when the military wanted to see if bicycles were practical vehicles. Buffalo Soldiers also kept order in the Alaskan gold-rush towns of Dyea and Skagway, now commemorated at the Klondike Gold Rush National Historical Park, and between 1867 and 1885, they served at Fort Davis, now a national historic site.

The Buffalo Soldiers eventually left the parks to be stationed elsewhere. In the ensuing years, many fought the last of the Indian Wars and retired in Arizona, Montana, Nebraska, and Texas to farm their own land. Meanwhile, Buffalo Soldier regiments went on to fight in World War I and World War II, before President Truman desegregated the military in 1948.

enlist in the 38th Infantry, and patrolled the Santa Fe Trail.)

"If you had that kind of sense that you were as good as anyone else, that could get you killed in the South," says Shelton Johnson, an interpretive ranger in Yosemite National Park who helped revive the story of the Buffalo Soldiers after stumbling upon a historic photo of the soldiers in the research library of Yosemite National Park. "Ironically enough, the safest place for an African-American man [who felt he was as good as any other man] was in the Army."

The military not only offered room, board, a uniform, a weapon, and a salary of \$13 a month, it cultivated a sense of pride in men. Some of these men had been born into slavery, after all, and the rest were born shortly after President Lincoln issued the Emancipation Proclamation.

"The Army was and still is a place of opportunity, and it's always been ahead of society," says Brian G. Shellum, author of a two-volume biography of Capt. Charles Young, a Buffalo Soldier and West Point graduate. "The Buffalo Soldiers probably felt more like Americans, like citizens, than [they had] anywhere else."

Still, the life of any soldier was not easy. They traveled rough country, subsisted on bland rations of beans and bacon, and endured the terror and tedium of war. Though they were paid the same as white soldiers, the Buffalo Soldiers struggled with racial prejudices at every turn. In letters to black newspapers, many Buffalo Soldiers expressed profound ambivalence over removing American Indians from their lands. Escaped slaves often joined tribes,



BUFFALO SOLDIERS of the 25th Infantry,
Fort Keough, Montana, 1890.



GLADSTONE COLLECTION OF AFRICAN AMERICAN PHOTOGRAPHS, LIBRARY OF CONGRESS

such as the Seminoles in Florida, so many Buffalo Soldiers had American Indian blood themselves. The irony of oppressing another race in the name of one's own oppressors was not lost on them. But for many, it was the best option in a time when most African Americans had few choices beyond the life of a sharecropper.

THE PARK'S FIRST PROTECTORS

The Buffalo Soldiers posted in national parks faced particularly challenging

marches to Yosemite and Sequoia from Monterey, California.

Though the parks had regulations, there were no courts or judges to enforce those regulations, so the soldiers resorted to clever methods of discouragement. In some instances, they would deposit an offending sheepherder at one corner of the park and the herd at the other, 125 miles away.

Despite the challenges, the soldiers managed to keep illegal grazing down, fight forest fires, build trails and roads, and

Though the terrain was rugged, these soldiers found solace in the magnificent scenery that surrounded them.

work. Between 1891 and 1913, before the Park Service was born, the military was the sole protector of these nascent parks. During the summers of 1899, 1903, and 1904, the duty fell to regiments of Buffalo Soldiers. Over those three years, about 500 men made the 200-plus-mile

expel poachers who wiped out wildlife at alarming rates when unchecked. It's easy to imagine that even though the terrain was rugged, these soldiers found solace in the magnificent scenery that surrounded them.

"It is the cavalryman's paradise," wrote N.F. McClure of the 5th Cavalry, in the

Journal of the U.S. Cavalry Association in 1897. "Food and drink for his horse everywhere. Though the cold of spring and autumn may be biting, though the life may be lonely, though the work may be difficult—still, happy is the soldier whose lines fall amid these scenes of grandeur and sublimity, where nature has put forth her mightiest efforts."

A BLACK OFFICER

Capt. Charles Young was the third African American to graduate from West Point, one of the first to become a military officer, and the first African-American superintendent of a national park. Young arrived in Sequoia National Park with the 9th Cavalry in the spring of 1903. Most Buffalo Soldier regiments were led by white officers, and his presence caused a stir among locals. But Young quickly proved himself an exceptional leader.

Under his superintendence, the troops finished the road to the Giant Forest, working cooperatively with local

CAPTAIN CHARLES YOUNG,
photographed in 1903, when
he was acting superintendent
of Sequoia National Park.

white engineers and construction workers. His men also cut down on illegal grazing in the park and poaching of wild game. Young persuaded locals who held claims to 3,877 acres of land within national park boundaries to sell at a fair price. Though Washington bureaucrats didn't follow through in time (and instead bought the land ten years later), Young's negotiations were rare and remarkable. So was his unusual commitment to conservation.

"Indeed, a journey through this park and the Sierra Forest Reserve to the Mount Whitney country will convince even the least thoughtful man of the needfulness of preserving these mountains just as they are," he wrote in a 1903 military report.

At the end of the summer of 1903, Young's troops, the engineers, and the construction workers were so impressed with his leadership that they proposed naming a tree after him. He declined and suggested that it be named after Booker T. Washington, who heralded the Buffalo Soldiers as standard bearers of the race.

More than 100 years later, a retired curator leafing through an Ohio archive found a photograph of this exact tree, with its Booker T. Washington plaque. Park staff found the tree, and though the original nail remained, the plaque had fallen and been forgotten. Now the tree is known again for the esteemed thought leader, and staff at Sequoia, Yosemite, and the Presidio are researching and sharing a story that had been lost for a century.

THE BUFFALO SOLDIERS' LEGACY

Ranger Shelton Johnson shares the Buffalo Soldiers' story through his impassioned and popular weekly presentation at Yosemite, in which he dons their iconic blue uniform to portray a sergeant stationed in Yosemite in 1903. Some visitors

NPS HISTORICAL PHOTOGRAPH COLLECTION



look troubled or upset at the idea that African Americans played an important role in the settling of the West (they formed 10 percent of the military) and the preservation of the national parks.

"The dominant perception is there were no black people in the West," says Johnson. "By telling the Buffalo Soldiers' story, we're countering literally 100 years of absence and everything in our mindset as to who was in the American West."

It's a story that park visitors of all colors need to hear. America has never been more diverse, and to engage all Americans—and encourage them to care about these public lands—the Park Service needs to reach out to minorities who haven't identified with the parks in the past, says Stephen Haller, a historian at Golden Gate National Recreation Area in California.

"The park story is really a more diverse story than we have been led to believe," says Haller. "The parks have often been perceived as a fairly exclusive 'white-guy club,' and as it turns out, it's not so much—not exclusively. I think that's something we can all be really happy about." **NP**

KATE SIBER is a freelance writer based in Durango, Colorado. Her work has appeared in *Outside*, *National Geographic Traveler*, and *The Boston Globe*.

NPCA @ WORK

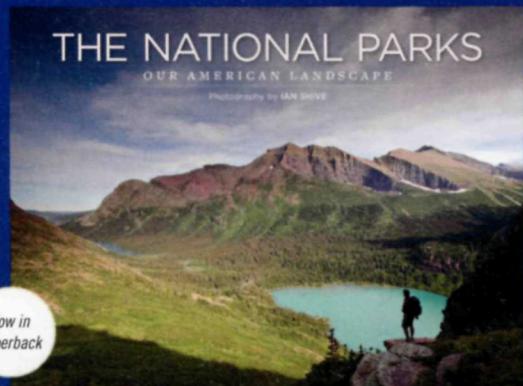
NPCA has joined several local groups and historical associations to advance recognition for the Buffalo Soldiers in the form of the National Parks Study Act. The bill authorizes the Secretary of the Interior to investigate ways to commemorate and interpret their legacy with the designation of a national park unit. The study itself will determine several options and locales for the site; a trail tracing the route of the 9th U.S. Cavalry's trek from the Presidio to Sequoia Kings Canyon is one of the current favorites. The creation of a new park unit is a lengthy process that generally takes several years, but this is a crucial first step.

The House version of the bill (H.R. 1022), sponsored by Rep. Jackie Speier (D-CA), passed in January 2012. The Senate version of the Buffalo Soldier Study Act (S. 544) introduced by Sen. Dianne Feinstein (D-CA) last March is now being reviewed by the National Parks subcommittee of the Senate Committee on Energy & Natural Resources, and could be put to a full Senate vote this fall.

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back to the **LAND**

TERRY INGRAM at sunrise,
standing in a field on his farm
in Brandy Station, Virginia.

By Melanie D.G. Kaplan
Photos by Benjamin C. Tankersley

What on Earth does farming have
to do with the Chesapeake Bay?
As it turns out, everything.

TERRY INGRAM'S FARM is 75 miles from the shore of the Chesapeake Bay, but his decisions have an impact on the waterways throughout the region, and on species like black skimmers, pictured on the Patuxent River.

Terry Ingram stands just outside the milking parlor on his Brandy Station, Virginia, dairy farm and faces a panorama that has an unyielding power to calm.

"Come oooooon," he yells, cupping his hands around his mouth as his voice carries across the open pasture. He yells again. Several minutes later, a group of cows in the distance ambles out of a small cluster of trees. Calves scamper alongside their mothers as the herd follows a path to a new section of grass, mooing all the way.

Thanks to a number of changes Ingram has made since his grandfather owned the farm, his dairy cows are now 100 percent grass-fed. Not only are the animals faring better (Ingram points to horizontal "happy lines" on their coats, indicating they're healthy and content), but this farmer knows he's doing his part to protect the landscape and reduce environmental impact.

Although the Culpeper County farm is 75 miles from the Chesapeake Bay shoreline, Ingram appreciates the connection between his operation and the

health of the largest estuary in North America. "Growing up in the '80s, I remember the Save the Bay stickers," he says. "I understood they wanted to protect the Chesapeake

Bay, but I thought it was more industrial pollution or the stuff that people pour down the drain," he says. "Now I know that anything that touches that stream affects the bay."

To learn what farmers like Ingram are doing to help reduce pollution that ends up in the Chesapeake, I drove southwest from Washington earlier this year, away from the bay. The green hills rippled like roller coasters, and I passed signs that advertised bulls and straw. On the dirt road leading to Ingram's farm, another sign read: "2009 Bay Friendly Clean Water

Farm Award," and I was reminded that even in farm country, there's no ignoring our treasured waters.

THE PROTEIN FACTORY

The estuary that H.L. Mencken once called an "immense protein factory" encompasses roughly 64,000 square miles and almost 12,000 miles of shoreline in six states and the District of Columbia. More than 3,600 species of plants and animals live along the region's marshland, rivers, and streams; the bay once produced 25 million bushels of oysters a year and half of the nation's blue crabs. And it's hard to overestimate the opportunities for recreation in the watershed, which is home to 54 national park sites—the health of which are directly influenced by the waters that flow around and through them. For those of us who are lucky enough to live close to the bay, it is our refuge, our playground, our haven.

But the watershed's human population—17 million and growing—is causing serious damage to the bay and its fish and wildlife. Today, the Chesapeake harvests only 200,000 bushels of oysters a year and just one-third of the nation's blue crabs. Every time a parking lot or shopping mall is built, forests and wetlands that act as natural water filters are destroyed. Without those filters, local tributaries are more contaminated. That pollution is carried into the bay—clouding waters, blocking the sunlight needed by underwater grass beds, and depriving the water of oxygen that underwater creatures so desperately need.

Peter Marx, federal affairs director at the Choose Clean Water Coalition, says by volume, the Chesapeake has the largest land-to-water ratio of any coastal body in the world, which exacerbates the pollution problem. "The bay is extremely shallow—an average of 20 to 21 feet," he says. "And the watershed is 16 times larger than the bay." The upshot: What happens on the land in the watershed has an incredible impact on the Chesapeake. "There's so much land and relatively little water," Marx says. "We've learned over the years that the biggest impacts on the living resources of the bay are nutrients [nitrogen and phosphorus] and sediment."

Although these nutrients come from a variety of sources—like poorly planned subdivisions where paved surfaces channel lawn chemicals into the bay during heavy rains—agriculture is the largest single

What happens on the land has an incredible impact on the Chesapeake.



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THE FARM BILL

Every five years, the U.S. Congress legislates changes to our national agricultural policies through a law commonly known as the Farm Bill. Thanks to conservation programs authorized by the bill, millions of dollars are set aside to help farmers improve the quality of rivers and streams that flow into the Chesapeake Bay and many other regions. But as the law nears its expiration in September, NPCA is concerned that spending cuts will seriously affect the very farmers who are working to clean up these waterways. (The Senate passed a version of the Farm Bill in June; the bill was under consideration in the House of Representatives as this issue went to press.)

For instance, the Farm Bill created the Chesapeake Bay Watershed Initiative to help reduce pollution (from fertilizers and animal waste) and sediment (from soil eroding into waterways). The program authorized \$188 million over four years to help farmers better manage their lands, which can

mean anything from planting trees that help reduce erosion to building fences to keep cattle out of streams.

In 2011 alone, farmers like Terry Ingram worked with USDA's Natural Resources Conservation Service (NRCS) to set up more than 60,000 conservation practices in the watershed region. The service helped farmers set up fencing, build watering troughs and wells, and plant cover crops such as alfalfa. The program also assists in developing management plans for grass-feeding livestock and distributing fertilizer in such a way that it is less harmful to the water.

Ingram says the funding provided by NRCS was critical to his growth. Today, he's satisfied with the way he's farming, confident that his animals and customers are happy, and certain that he's harming the bay less than many other landowners. "I'd have to do a study to see if I'm zero impact, but I think I'm pretty gentle on the bay," he says. "This is the sweet spot."



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contributor, according to the Chesapeake Bay Foundation. When it rains (or land is over-irrigated), excess fertilizers, pesticides, and disturbed soils wash into local waterways like the Susquehanna and Shenandoah Rivers. Animal manure and poultry litter—from as close as the Eastern Shore of Maryland and as far away as Binghamton, New York—contribute about half of the watershed's agricultural pollution load.

A BLUEPRINT FOR CLEAN WATER

For decades, states in the Chesapeake Bay Basin have worked with the Environmental Protection Agency to reduce pollution emptying into their waterways. Yet the goals of the Chesapeake Bay Program—created by the Clean Water Act, which requires reducing specific pollutants by specific amounts—remain unmet. Nitrogen, phosphorus, and sediment continue to pollute the bay, causing a serious decline in aquatic species like blue crabs, striped bass, and oysters

In December 2010, EPA released a new blueprint outlining pollution reduction needed for the region, called a Total Maximum Daily Load (TMDL). These limits require the watershed states—Delaware, Maryland,

New York, Pennsylvania, Virginia, and West Virginia, and the District of Columbia—to make big changes to the quantity or “diet” of nutrients going into the bay by 2025. TMDL calls for a 25 percent cut of nitrogen and phosphorus pollution flowing into the bay and a 16 percent cut in sediment. Each of the states and D.C. has created its own plan for meeting these targets, and they are currently refining their proposals.

How distant is the target? The Chesapeake Bay Foundation publishes a scorecard for the bay every two years, which is a good measure of progress. The organization uses 13 indicators—including pollution, health of aquatic habitat, water

agree that preventing erosion and runoff is more effective than treating water once it's polluted. Furthermore, these practices ultimately reduce costs for farmers. So in agricultural areas, which now make up nearly one-quarter of the Chesapeake watershed, a growing number of farmers are changing their practices to make their operations more sustainable. Some of the funding for these improvements comes from state programs such as the U.S. Department of Agriculture's Conservation Reserve Program. This program encourages farmers to reduce the amount of erosion and runoff from their farms, which, in turn, protects groundwater and nearby streams. For example, in exchange for not planting crops on these environmentally sensitive lands, CRP pays farmers to plant permanent vegetative covers. According to the U.S. Environmental Protection Agency, this prevents the erosion of 325 million tons of soil per year—enough to fill 19.5 million dump trucks.

Beth McGee, a senior water quality scientist for the Chesapeake Bay Foundation, says farmers have access to funding for nearly every conservation practice that protects water quality. "Farmers generally want to do the right thing," she says, "but often don't have the financial resources." In the watershed states, there are various networks of farmers who have already made changes and are encouraging other farmers to follow their lead.

McGee says planting trees along a stream—creating forested buffers—is one of the most effective ways to filter pollutants. The idea of trading farmland for trees is revolutionary among farmers, but the payoff is huge—not only by filtering but by keeping cows and their waste out of the water.

clarity, and wildlife—to gauge the health of the bay. The number is based on the score of 100 that we would have seen had we accompanied Captain John Smith as he explored the pristine waters more than 400 years ago. The score sank to 23 in 1983, and in 2010 it was up to 31. Although reaching a perfect score of 100 again is unlikely, the foundation's Beth McGee says a score of about 70 is attainable.

"From a scientific perspective, we know more about this estuary than any estuary in the world," says McGee. "We have very sophisticated models to help us understand what we need to do and where we need to do it. We're well poised to be successful."

“Farmers generally want to do the right thing, but often don’t have the financial resources.”

Marx stresses that well-run farms are one of the best investments in the watershed, because the public values open space. “Preserving farms will keep land open,” he says. “Farms are iconic; they’re part of our landscape and heritage.”

WHAT'S OLD IS NEW

At Ingram's farm, we stand in the sun and talk about some of the practices he's adopted for his 400 acres. Rather than house cows in a barn, where manure is concentrated and needs to be removed regularly, Ingram moves his cows from pasture to pasture. There, cattle help earn their keep by distributing the manure themselves—simply by walking around. Fencing along the stream keeps cows out of the water, and stone paths reduce runoff from the cow walkways.

And by moving the animals every 12 hours, Ingram ensures there is enough grass remaining so soil is not exposed; when it rains, nutrients are absorbed into the root structure rather than rolling off the ground into the streams.

“People will come here and say, ‘Look at all that grass you’re wasting,’” Ingram says. “But the grass is feeding the soil. It’s full of earthworm holes, so it’s like a sponge absorbing water. I’m working *with* nature rather than against it.” He says farmers have been taught for generations that the best way to farm is to maximize production with modern chemistry, like fertilizers.

“It’s improved yields, but at the risk of destroying topsoil,” he says. “If you run things to the extreme, something will suffer.” Ingram, who doesn’t use any pesticides, also doesn’t need to buy feed for his cows. He knows he could get more production per cow if he fed them grain, but when he used to farm that way, the cows were tired, listless, and sick. Now, his operation is healthy and certified organic; Ingram sells his milk to Organic Valley, a cooperative that supplies ingredients for Stonyfield yogurt. “Today,” he says, “I’m producing what the land is giving me.”

Two years ago, Ingram put his farm in conservation easement, an agreement with Virginia Outdoors Foundation that guarantees his land will remain



undeveloped in perpetuity. In addition to protecting the air, water, and wildlife, the easement provides tax benefits and helps Ingram sleep better at night, knowing that his farm will never become a subdivision.

These days, Ingram isn’t too far from turning the corner on profit, thanks partly to the Environmental Quality Incentives Program (EQIP), created by the federal Farm Bill. EQIP has a cost-share element that funded the set-up of many of Ingram’s conservation practices, from fencing and livestock water crossings to water troughs and a well. The program offers extra incentives for new farmers and minorities. Ingram acknowledges that he will never become rich farming this way but says these practices are good for the cows, good for the environment, and good for the consumer.

“The most important thing is to recognize the role of the individual at these farms,” says Sue Ellen Johnson, director of Agriculture and Rural Economy

BETH MCGEE,
senior water quality
scientist with the
Chesapeake Bay
Foundation, pictured
at their headquarters in
Annapolis, Maryland.

Most farmers want to protect their heritage, their livelihoods, and their communities.

programs for The Piedmont Environmental Council (PEC), which was created 40 years ago in part to preserve open space and working farms. The group launched Virginia's first "Buy Fresh Buy Local" campaign and helps farmers develop new outlets for their sales. PEC also plays a key role in connecting landowners to financial assistance programs, and has helped farmers fence out more than 1,000 cows from streams where they might add to the sediment and nitrogen and phosphorus loads flowing toward the bay.

Johnson recognizes that it's often difficult for farmers to change their practices after a family has farmed a certain way for generations. "These people are truly independent thinkers," she says, "and not afraid to go their own way. Most farmers want to protect their heritage, their livelihoods, their communities and the environment."

Pamela Goddard, Chesapeake and Virginia Program manager for NPCA, says good conservation practices on working farms are the key to stopping pollution in the Chesapeake Bay. "Terry Ingram has shown us that you can have a viable farm while protecting the community," she says. "We need to help more farmers tap into these types of programs."

As Ingram and I walk toward my car, he points out a field of wild mustard. Bees bop around the tiny yellow flowers,



butterflies flit, and birds tweet in stereo. A couple of decades ago, Ingram had no intention of farming. But after growing up on the farm and helping his grandfather feed chickens, he says he couldn't get it out of his blood. Learning about grass farming further persuaded him that working the land—in a sustainable manner—was the life for him. Now, he seems to have no regrets about the path he's chosen. "My intention is to give these living organisms what they need to thrive," he says. "And that translates into healthy food for people and an honest living for myself." **NP**

MELANIE D.G. KAPLAN is a Washington-based freelance journalist. She is a travel writer for The Washington Post and a contributing editor at SmartPlanet/CBS Interactive.

NPCA@WORK

NPCA is one of the leaders of America's Great Waters Coalition, which formed in 2009 and now includes more than 75 national, regional, state, and local organizations working to protect and restore more than a dozen waterways. By engaging the public, educating lawmakers, and lobbying for crucial funding, the coalition is working to protect areas like the Puget Sound, the Everglades, the Colorado River, the Great Lakes, and, of course, the Chesapeake Bay, all of which are directly linked to national parks in their regions. Last fall, NPCA produced *Protecting Our Chesapeake, Protecting Our National Parks*, a report identifying challenges faced by the Patapsco River in Maryland and the James River in Virginia, which have impacts on Fort McHenry, Colonial, and Fort Monroe park sites. To learn more about these efforts, visit www.npca.org/greatwaters.





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A WOMAN HOLDS A TINY FISH
inside a shell found along the beach
at Canaveral National Seashore.



COAST *to* COAST

FROM MISSISSIPPI'S GULF COAST BEACHES TO FLORIDA'S ATLANTIC SHORES, THESE NATIONAL PARKS HAVE MORE TO OFFER THAN WHITE SANDS AND SALTWATER.

BY MARK SCHROPE
PHOTOS BY JEFF
& MEGGAN HALLER

If you spend the night at the main campground for the Gulf Islands National Seashore, brace yourself for a morning that begins with the traditional military bugle call, "Reveille." It is not what you'd expect on a typical day at the beach, but this is no average beach.

Gulf Islands National Seashore includes chunks of Florida's panhandle and Mississippi's barrier islands. It encompasses some of the best and longest undeveloped coastal stretches in the country, complete with white sandy beaches that make frigid Northerners swoon. But the inspiration for the park's formation in 1971 was as much about protecting examples of every type of coastal military defense system ever built in the United States as it was about relaxation. Today, the entire park serves as a handy place to point those who make the common mistake of thinking that Florida is short on history.

Gulf Islands: Florida

The Florida side includes three forts that look out over the thin ribbon of water that is the only inlet to Pensacola's massive harbor; a fourth fort rests farther inland. The government built the structures after the War of 1812 as part of a push

to protect the country's main harbors against any would-be invaders. Pensacola was especially important: In addition to being a major commerce center, as of 1825, it was also home to a major Navy shipyard—the only one at the time on the entire Gulf of Mexico.

The park's flagship is Fort Pickens, where reminders of the former military presence are everywhere. Here on Santa Rosa Island, just south of Pensacola, you can still wander the scenic brick halls of the fort where the military once held famed Apache leader Geronimo. Some portions are crumbling, but much remains intact.

Surprisingly, no foreign enemies ever challenged the fort, only internal ones. The first time it saw action was during the Civil War when the Confederates briefly took control of the other Pensacola forts and the Union

THE ZOOK FAMILY tours historic Fort Pickens (below) and Derick Wells tries his hand at skimboarding at Opal Beach (opposite), both in Gulf Islands National Seashore.



held Fort Pickens with some help from the Navy. It was an ironic battle given that Col. William Chase led the attack against Fort Pickens—the same man who had overseen its construction by slave labor.

But Fort Pickens didn't fade with cannon fire. Military technology advanced, and the fort did, too, as the government constructed new concrete structures capable of repelling more powerful cannons and eventually modern artillery.

Battery Langdon, one of numerous fortifications you can wander, now looks like a kid's dream fort, buried beneath a man-made hill with sealed entryways hidden behind brush and unseen from the road or beach. These batteries grew through both world wars. By World War II the 12-inch guns here could hurl rounds 17 miles offshore, and they were so powerful the concussion of a single



SIDE TRIP



Kennedy Space Center, Florida

Having your seat flip fully vertical is more disconcerting than you might expect,

especially once the rumbling begins. Though the Shuttle Launch Experience, a theme park-style simulation ride, remains a highlight of the Kennedy Space Center Visitor Complex, the focus is shifting toward the future of space exploration. Soon companies hope to send the first commercially owned craft to the space station, and if all goes well NASA will one day send its astronauts to space via the new Orion capsule.

You'll want to stroll the rocket garden with its towering representatives from the Mercury, Gemini, and Saturn programs, and perhaps meet an astronaut

stopping in for a scheduled chat. But to really see what the place is about, take the bus tour out to a viewing tower to see multiple launch pads.

Down the road, you'll relive the tense moments leading up to an Apollo launch through a widescreen re-enactment at a former command center, then stand in awe below a massive Saturn V rocket. For those itching to go deeper, the Up-Close Tour offers periodically changing stops that can include even closer launch-pad views or a peek inside the cavernous Vehicle Assembly Building.

By November, one of the three decommissioned space shuttles will be at the Visitor Complex, but it won't be open to the public until July 2013.



“By moonlight the soft, wind-sculpted dunes look almost like snowdrifts.”

report once split an artilleryman's pants. Though many soldiers trained here and stood watch for U-boats, ships, and planes, none ever came close enough for battle. Eventually guided missiles, atomic bombs, and the like came along to force new military strategies that left places like this obsolete.

Modern development in this area is so sparse that it's easy to stand at such sites and imagine what it would have been like to be there during wartime, straining to spot signs of an approaching enemy.

Once you've had your fill of military history and scenic human handiwork, choose one of several beach access points through the sea oats to those wide, white sandy beaches. By moonlight the soft, wind-sculpted dunes look almost like snowdrifts.

Across the narrow inlet at Perdido Key, only a few scattered bunkers remain from the military days. Instead, on this side one of the most attractive features is the potential for seclusion, which is limited only by your willingness to walk—the road ends five miles before the beach does. Naturally, most visitors set up their chairs and umbrellas near

boardwalks, but head east far enough and you might even be alone. For those willing to make the slog, the Park Service allows camping right on the soft sand, as long as you make it a half-mile beyond the end of the road.

Gulf Islands: Mississippi

Though the Florida side is the more heavily visited, Gulf Islands also includes several Mississippi barrier islands south of mainland beaches like Gulfport and Biloxi. Two of these outposts, Petit Bois (pronounced “petty boy”) and Horn, are both congressionally designated wilderness areas.

As a result, these islands' 20-plus miles of beaches are beautifully void of just about anything but pine trees, white sand, and wildlife like bald eagles, black skimmers, and ghost crabs. In the islands' interiors, a rodent of unusual size known as a nutria might even cross your path. If the weather conditions are calm enough, you'll take these wonders in while looking out across waters that are a nearly tropical turquoise.

You can reach the wilderness islands only by private boat, but a public ferry

A FULL-MOON WALK led by Park Interpreter Beckie Mims at Langdon Beach, Gulf Islands National Seashore.

runs out to nearby West Ship Island twice a day in the Summer and once a day in the Fall. The site features a long boardwalk, bathrooms, a snack bar, and a beach rental shack. But the island's most striking feature is another red-brick gem called Fort Massachusetts. It is surreal to see such a structure 10 miles from the mainland, seemingly resting on shifting sands, though it has withstood the onslaughts of countless hurricanes, including a serious beating from Katrina in 2005.

The Mississippi islands were some of the hardest hit by the 2010 Deepwater Horizon disaster in the Gulf, and plenty of oil washed onto beaches on the Florida side of Gulf Islands as well. Now, more than two years after the oil stopped flowing, tar balls from the spill still wash ashore. But ongoing cleanup efforts are extensive enough on the more popular beaches in Gulf Islands such as West Ship and Fort Pickens that most visitors won't spot a drop. Tar balls remain at remote areas such as Horn, but even there they are mostly scattered and shouldn't pose problems to visitors.

Canaveral National Seashore

Where Gulf Islands National Seashore is a monument to the military past, over on Florida's east side, the Canaveral National Seashore offers an homage to more modern pursuits. This 24-mile stretch of scenic lagoon and beaches owes its existence to the space program, which bought up huge chunks of land around Kennedy Space Center.

Just about anywhere you go in the south end of the park, a beautiful stretch east of Titusville called Playalinda Beach, is within view of NASA's gargantuan spaceship garage called the Vehicle Assembly Building. The shuttle launch pads are so close that during



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TRAVEL ESSENTIALS

If you're heading for the Florida side of Gulf Islands National Seashore, the Pensacola airport is about 20 miles from Fort Pickens, which has a large campground across the road from the beach.

Nearby Pensacola Beach offers a range of accommodations including Jimmy Buffet's Margaritaville Hotel, which achieves an island vibe, though employees will confess the daily Buffet soundtrack can get a little tiresome. Stop at Peg Leg Pete's for some of the house specialty spicy Lafitte oysters—fresh shucked, plump beauties from nearby Apalachicola Bay with jalapenos, bacon, cheddar, and spices.

For access to the Mississippi side, the Gulfport-Biloxi airport is your best bet. It's about five miles from the marina, where you can catch the passenger ferry to West Ship Island.

From both the Melbourne and Orlando airports it's about an hour's drive to the south side of Canaveral National Seashore. Stop at Titusville's Dixie Crossroads Seafood and sample the rock shrimp, a local favorite that might be compared with miniature lobsters. Most diners will down the basket of addictive corn fritters that comes with each meal well before the shrimp arrive. Titusville offers a few budget hotel options, or head down the road a bit farther to Cocoa Beach for high-end names.

To reserve one of the limited campsites in the Apollo Beach area, call 386.428.3384. Reservations are possible only seven days in advance, with lots of competition for spaces. Phone lines open at 9 a.m., and those in the know start dialing then.

A YOUNG BOY gets buried in the sand at Opal Beach, Gulf Islands National Seashore.

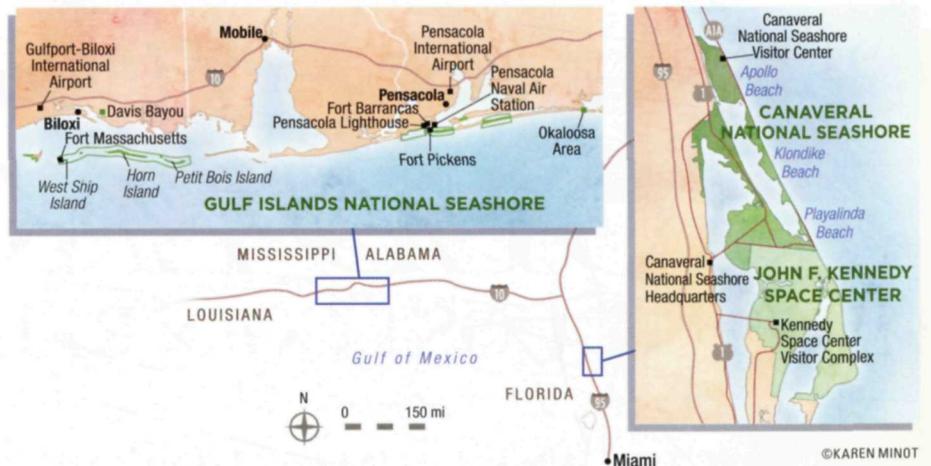
"Look for manatees or the occasional alligator as you head toward mangrove passages or palm-fringed beaches."

launches officials had to close the entire area. Though the shuttle program has ended, there are still plenty of commercial satellites and other launches, but these generally blast from pads farther away, so closings are rare.

If your ideal day at the beach involves neon-splattered trinket shops and hot dog vendors, then it's best to look elsewhere. At Playalinda, you'll find plenty of parking areas to spread out the crowds, with no buildings visible but NASA's, and even those are distant. You can walk as far north beyond the last parking area as you fancy, but you'll need to ask for a back-country pass at the entry gate.

Be warned: For decades the beach just beyond the last parking area has been a de facto clothing optional zone. Technically, nudity on the beach is illegal, but only by local ordinance, and local police rarely make it out this far. There's no federal law against the nudity, so park rangers can't ticket. Hence, a few bathers of all ages have usually lost their swimsuits. Stay away from that last parking area, and it won't be an issue.

Hang a left on your way to the beach on one of the accessible dirt roads and you'll find some of Florida's best



birding grounds. Herons, hawks, and roseate spoonbills, among countless other species, are easy to spot.

You can also access Canaveral from a north area known as Apollo Beach, just below New Smyrna Beach. Each end of the park has its own boat ramp, and paddling the scenic Mosquito Lagoon that stretches the length is much more pleasant than its name implies. Look for manatees or the occasional alligator as you head toward mangrove passages or palm-fringed beaches.

The south end of the lagoon is more open; the northern end is a maze of mangrove islands. With few exceptions the lagoon is shallow, making it ideal for wading, kayaking, and canoeing, and it's a world-class destination for reeling in redfish, snook, and trout. Surfcasting for pompano or whiting is an alternative for those who prefer to keep their feet in the sand.

Camping is available only at the Apollo side, with two sites right on the beach and 14 others scattered around the lagoon's mangroves.

Most visitors will make the mistake of missing Seminole Rest, because it's outside the main park areas and a little harder to find. The showpiece here is a three-story house with a tin walk-around balcony and a truly stunning all-yellow pine interior. The owners

moved the house here in 1888. Everyone in the small town of Oak Hill called this English minister and his wife Lord and Lady Turner, though the titles were just nicknames. Official tours start every Sunday at 2 p.m., but you're sure to find a ranger happy to fill you in on the home's history anytime it's open.

While admiring the house and lagoon views, be sure to look straight down. You'll be standing on a 13-foot-high mound of quahog clamshells. This local delicacy was a staple for the Timucua Indians who lived in these parts for thousands of years before Europeans came along. As they ate, they piled their shells. Such Indian mounds are scattered throughout the state. Many, especially in this area, got scooped up during the quest to build a railroad all the way to Key West, but the Turners quite literally stood their ground here when the diggers came asking. Between the Turners and the Timucua, there's a fine glimpse here of what is in fact a rich Florida history. And a glance across the lagoon to Apollo Beach—about three miles as the gator swims—serves as a fitting reminder of how much Florida still has to offer. **NP**

MARK SCHROPE is a freelance writer who lives just outside Canaveral National Seashore in Florida.

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NATIONAL ARCHIVES

CLARA BARTON didn't move into the home in Glen Echo, Maryland, until she was 75, at which point the building also served as Red Cross offices and a storage space.

blends into the ceiling, also made of the draped cloth. Fittingly, the founder of the American Red Cross and the famed Angel of the Battlefield during the American Civil War had adapted the bandage cloth into building material. "Her diary doesn't explain why she chose muslin," says Park Ranger Susan Finta, "but there are entries complaining about the cost, smell, and time it takes to cure plaster. And the next thing you know, she's nailing muslin all over the place."

Built in 1891, the house was given to Barton by two brothers with plans to develop a cultural and intellectual residential community in Glen Echo, Maryland, nine miles from downtown Washington, D.C. The Baltzley brothers believed that if the world-renowned humanitarian lived in the community, others would buy property there. As it so happened, Barton was looking for a permanent headquarters for her fledgling organization.

But she soon found that the three-hour commute to Washington—by trolley and horse-drawn bus—proved too much for her hectic schedule, and she moved back to D.C. The building became her warehouse. Barton didn't make it her permanent home until the trolley line reached the site; she was 75 years old.

Even then her home remained primarily a warehouse. Shelves, closets, and hidden stairway cupboards were there to meet the needs of the Red Cross. "It's about being prepared before disaster occurs," says Finta. "People donate items when they want to give, not necessarily when you need them, so Barton needed plenty of storage." The eight to 10 people staying over at any given time—traveling from New York to Washington meetings, for example, or working on a Red Cross

Angel of the Battlefield

Clara Barton's home, just outside of Washington, D.C., tells the story of the Red Cross founder.

THE FIRST THING TO CATCH YOUR EYE when you walk through the doorway at the Clara Barton National Historic Site is a wide, V-shaped piece of draped muslin. The stark white cloth—used to hang a ceiling lamp—stands out against the dark side paneling and wooden stairways and

project—lived out of their trunks.

Of the 30 rooms, Barton claimed only one as her own. The bed she died in is still here, as is the plain wooden washstand she brought from her family home in North Oxford, Massachusetts. “She appeared elegant and formal in portraits, but her personal lifestyle was not one of extravagance,” says Finta.

Restored to the era of her occupancy, the house and its contents underscore a key personality trait: frugality and scant separation between Barton’s cause and her personal life. She paid the organization’s telephone bill, the Red Cross paid no rent or mortgage, and workers volunteered—or they might be paid in donated dresses. “The whole household routine here was very complicated,” says Finta. “The Red Cross’ chief field agent might have split his time as a groundskeeper turning the turnip bed, while Barton, the president, scrubbed bathrooms.”

Three main rooms served as Red Cross working and dining space, set up today with roll-top desks, a vintage telephone, and other Victorian-era

The house and its contents underscore a key personality trait: frugality and scant separation between Barton’s cause and her personal life.

furnishings based on old photos and records. From this spot, Barton ran the organization for the last seven of her 23 years as president, undertaking disaster-relief operations for the Spanish-American War; the Galveston, Texas, hurricane; and an epidemic of typhoid fever that struck Butler, Pennsylvania, in the early years of the last century.

“Her pioneering of peacetime disaster and international war-relief efforts is an idea that truly changed the world,” says Finta. “We see her influence today with international aid coming after the earthquakes in Haiti and Japan, and the tsunami. When terrible tragedies strike, the nations of the world pull together. That’s due to Clara Barton.”

But there’s more to Barton than the Red Cross—even if she didn’t realize it herself—and you’ll discover that

at this site, too.

Barton spent only the last 15 years of her illustrious life at the Glen Echo site, which the Friends of Clara Barton group gave to the Park Service in 1975. But the ranger-led tour encompasses the story of her entire life, placing it in the context of her times, allowing visitors not only to see how she lived and worked but to learn about her other trailblazing accomplishments.

“She was an individual capable of firm action, strong beliefs, and she had an ability to see a need clearly and fulfill it,” says biographer Elizabeth Brown Pryor. “To everything she did, she brought strong idealism and unfailing energy. She was truly exceptional.” **NP**

HEIDI RIDGLEY lives in Washington, D.C., and writes about history, wildlife, and travel.



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LIFE BEFORE THE RED CROSS

Clara Barton started New Jersey’s first free public school, raising enrollment from six to 600 students in a year. Unable to accept a woman principal, the town hired a man—at three times her pay. “I may sometimes be willing to teach for nothing,” she told the Bordentown school board, “but if paid at all, I shall never do a man’s work for less than a man’s pay.” Barton quit and moved to Washington, D.C., in 1854, to work for the U.S. Patent Office, becoming the first female federal employee to work for equal pay.



That Was Then



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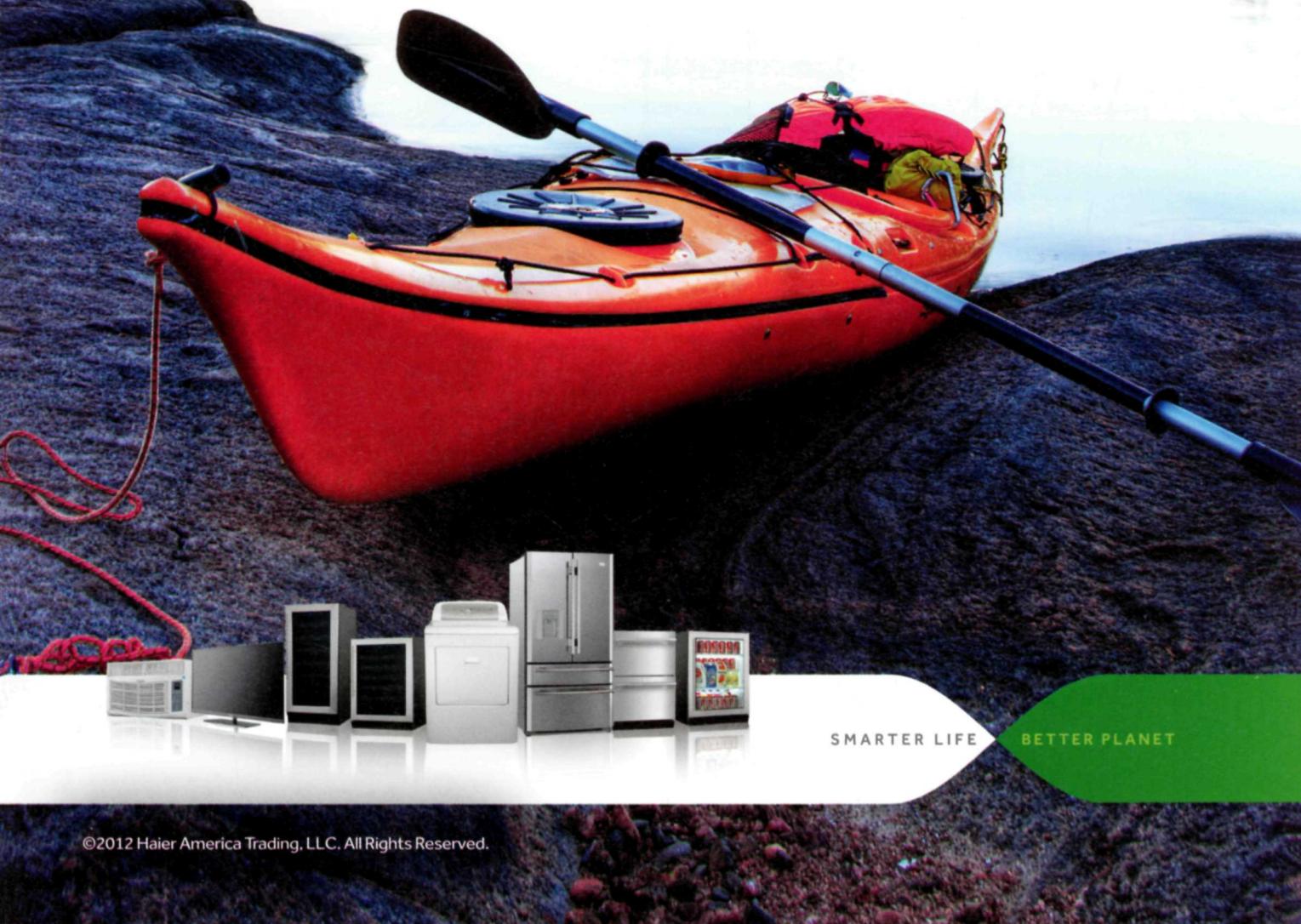
A VISITOR TO YELLOWSTONE proudly shows off park stickers indicating entrance fees paid at many Western sites, circa 1922.

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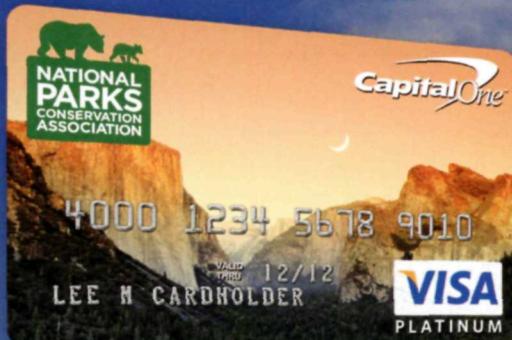
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