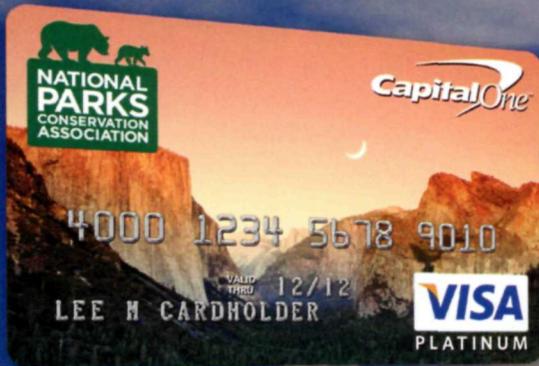


SUPPORT NPCA



Choose the Rewards card and earn **1.25 MILES FOR EVERY \$1 SPENT**

The National Parks Conservation Association has partnered with Capital One® to offer you three credit card options to fit your needs and generate funds for NPCA. Choose a card that earns you great rewards, one with a low introductory APR or another to help build your credit through responsible use. Plus, you can choose an image for your card that shows your support for protecting our national parks.

www.npca.org/card



SUMMER 2012 / Vol. 86 No. 3

COVER IMAGE:

PLASTIC COLLECTED on Point Reyes National Seashore, arranged by artists Richard Lang and Judith Selby Lang.

© RICHARD LANG AND JUDITH SELBY LANG

COMBS WERE AMONG THE FIRST items made from plastic, replacing tortoise shell and elephant ivory. And they're still washing up on Point Reyes' beaches today, fueling art projects for Richard Lang and Judith Selby Lang.

© RICHARD LANG AND JUDITH SELBY LANG



FEATURES

30

The Aftermath

Revisiting Gulf Islands National Seashore two years after the biggest offshore oil disaster ever.

By Mark Schrope

38

Prairie Solitaire

In the middle of America, Tallgrass Prairie National Preserve offers an intimate, grounding experience.

By Morgan Heim

46

Found Objects

Richard Lang and Judith Selby Lang turn trash into art at Point Reyes National Seashore in California.

By Amy Leinbach Marquis

CONTENTS

MORE THAN 40 YEARS after passage of the Clean Air Act, national parks are about to see some meaningful changes in air quality.



16



10



56



26

DEPARTMENTS

SUMMER 2012 / Vol. 86 No. 3

3 President's Outlook

4 Editor's Note

6 Letters

8 Echoes

10 Trail Mix

Another battle at Little Bighorn, a victory for park skies, a potential new park for Chicago, and a long walk through the Everglades and beyond

26 Findings

At Great Smoky Mountains National Park, a small creature makes for a big find.

By Jesse Fox Mayshark

28 Denizens

Hydraulic fracturing could endanger the American eel and harm several parks along the Delaware River.

By John Grossmann

56 Reflections

A family's pursuit to visit America's most endangered parks before climate change does irreparable harm.

By Michael Lanza

62 Backstory

Kalaupapa National Historical Park in Hawai'i is a monument to patients who lived with Hansen's disease and a priest who gave his life for them.

By Kevin Grange

64 That Was Then



ON THE WEB

For park news, insights into NPCA's work, and lighter fare like videos and photo tips, check out NPCA's new blog at www.parkadvocate.org.



BOARD OF TRUSTEES

CHAIR

*Thomas F. Secunda, *Croton-on-Hudson, New York*

VICE CHAIRS

*Sally Jewell, *Seattle, Washington*

*Robert B. Keiter, *Salt Lake City, Utah*

*Fran Ulmer, *Anchorage, AK*

SECRETARY

*John E. Huerta, *Elkins, West Virginia*

TREASURER

*Norman C. Selby, *New York, New York*

Donald B. Ayer, *Washington, D.C.*

Mary L. Barley, *Islamorada, Florida*

Wendy Bennett, *Golden Valley, Minnesota*

*William R. Berkley, *Greenwich, Connecticut*

*H. Raymond Bingham, *Woodside, California*

Frank Bonsal, *Glyndon, Maryland*

Robert F. Callahan, *Greenwich, Connecticut*

Joyce C. Doria, *Potomac, Maryland*

Victor H. Fazio, *Washington, D.C.*

Denis P. Galvin, *McLean, Virginia*

Carole T. Hunter, *Hobe Sound, Florida*

Roberta Reiff Katz, *Palo Alto, California*

*Alan J. Lacy, *Lake Forest, Illinois*

Ed Lewis, *Bozeman, Montana*

Stephen Lockhart, M.D., Ph.D.,

Oakland, California

William J. Pade, *Menlo Park, California*

Audrey Peterman, *Plantation, Florida*

*William B. Resor, *Wilson, Wyoming*

James T. Reynolds, *Henderson, Nevada*

Greg A. Vital, *Georgetown, Tennessee*

Peter Vitousek, Ph.D., *Stanford, California*

Olene Walker, Ph.D., *St. George, Utah*

H. William Walter, *Minneapolis, Minnesota*

***Executive Committee**

TRUSTEES EMERITUS

Diana J. Blank, *Bozeman, MT*

Steven A. Denning, *Greenwich, CT*

Gene T. Sykes, *Los Angeles, California*

EXECUTIVE STAFF

Thomas C. Kiernan, *President*

Theresa Pierno, *Executive Vice President*

Craig Obey, *Senior Vice President*

for Government Affairs

Ron Tipton, *Senior Vice President for Park Policy*

Karen Allen, *Vice President for Human Resources*

Kevin Barnhurst, *Vice President for*

Finance, Administration, and IT

Ray Foote, *Vice President for Development*

Tony Jewett, *Vice President for*

Regional Operations

Jim Nations, *Vice President for*

Center for Park Research

Linda M. Rancourt, *Vice President*

for Communications

Mina R. Stanard, *Vice President for Membership*

Mark Wenzler, *Vice President for*

Clean Air and Climate Programs

Julie Williams, *Vice President for*

Center for Park Management

Elizabeth Fayad, *General Counsel*

REGIONAL OFFICES

John Adornato III, *Director, Sun Coast*

Don Barger, *Senior Director, Southeast*

Alex Brash, *Senior Director, New York City*

Suzanne Dixon, *Director, Texas*

Lynn McClure, *Director, Midwest*

David Nimkin, *Senior Director, Southwest*

Joy Oakes, *Senior Director, Mid-Atlantic*

Tim Stevens, *Director, Northern Rockies*

Jim Stratton, *Senior Director, Northwest*

and Alaska

Ron Sundergill, *Senior Director, Pacific*



Navigating the Rapids

After I graduated from college, I served as a river guide throughout the Southeast and in Colorado and Utah. I often slept under the stars by night, and rode the rapids by day, navigating through parks like Dinosaur National Monument, Canyonlands, and the Grand Canyon. When I was learning to guide, it sometimes felt as though I was simply reacting to what rocks and waves threw my way, but I realized pretty quickly that it actually requires planning to successfully navigate the river.

That image comes to mind when I think about the next few months. This upcoming election is a very important one for national parks. Whoever sits in the White House in January 2013 will be president when the National Park Service turns 100 in 2016. We have a once-in-a-century opportunity to address some of the long-standing challenges facing our parks and ensure that they are well-funded, well-managed, and well-cared for into their second century.

Five years ago, we set a goal of raising \$125 million to build NPCA's capacity to protect and enhance America's National Park System and to create a national parks movement that catalyzes real, lasting change. We hit some unexpected obstacles along the way, including the deepest recession the country has experienced since the Great Depression, but your generosity and your love of the national parks helped us navigate the challenge. We're now on well our way to meeting the goal.

So far, we have raised \$120 million, or 96 percent of our \$125 million *Renewing Our Promise* campaign goal. To reach 100 percent by December 2012, we need your help. Once-in-a-lifetime commitments of \$5,000 or more as well as other gifts of modest proportions are crucial to our success. When you support NPCA, we use your gift to leverage more awareness of and funding for the parks. You can give in a variety of ways: By visiting npca.org or by contacting our Membership Team at 800.628.7275. No matter your gift's size, it's an integral part of our campaign and it's greatly appreciated.

Whether running a river, preparing for a Presidential election, or running a successful capital campaign, it's about good planning and reacting to what is thrown at you. Thanks for being part of our team.

Thomas C. Kiernan



Editor's Note



© RICHARD AND JUDITH SELBY LANG

A WREATH OF HAIRCLIPS, gathered at the shore of Point Reyes.

Fake Plastic Trees

Can something be beautiful and ugly at the same time? That's the question I've been wrestling with ever since I saw the art of Richard Lang and Judith Selby Lang, featured on this issue's cover and in the article beginning on page 46.

We first learned about the Langs a year ago, when the magazine's associate editor, Amy Marquis, saw an exhibit of their work, which incorporate bits of plastic found at Point Reyes National Seashore just north of San Francisco. We immediately realized there was a unique story here, and one with compelling images. But it's not an easy story to swallow, as Judith says: "People chide us all the time for making it look so beautiful. But we want to make it beautiful so people participate." And it works. When you see the toy soldiers, the barrettes, the combs, and the old hair curlers your mother used to wear, you see yourself as a child, you see yourself as a consumer, and you see yourself as quite possibly part of the problem. The key, of course, is to flip that switch and recognize yourself as part of the solution as well. Park ranger Loretta Farley believes the Langs' art has a much more dramatic impact on people than a "Don't Litter" sign ever could, and I can see why.

Reproducing these enormous images on an 8-by-11 sheet of paper hardly does them justice, but for anyone who isn't fortunate enough to admire their work in an art gallery, we think it's the next best thing. And we hope these images leave you pondering a few questions of your own.

Scott Kirkwood
NPMAG@NPCA.ORG

NationalParks

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

ADVERTISING INQUIRIES

YGS Group

3650 West Market Street, York, PA 17404

Jason Vranich: 800.501.9571 x185; jason.vranich@theYGSgroup.com

Marshall Boomer: 800.501.9571 x123; marshall.boomer@theYGSgroup.com

PRINTED ON 10% POST-CONSUMER WASTE RECYCLED PAPER



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 www.npca.org to sign up.

HOW TO DONATE

To donate, please visit www.npca.org or call 800.628.7275. For information about bequests, planned gifts, and matching gifts, call our Development Department, extension 145 or 146.

QUESTIONS?

If you have any questions about your membership, call Member Services at 800.628.7275. On a selective basis, NPCA makes its membership list available to organizations that our members find of interest. If you would like your name to be removed from this list, please call us at the number listed above.

HOW TO REACH US

National Parks Conservation Association, 777 6th Street NW, Suite 700, Washington, DC 20001-3723; by phone: 1.800.NAT.PARK (628.7275); by e-mail: npca@npca.org; and www.npca.org.



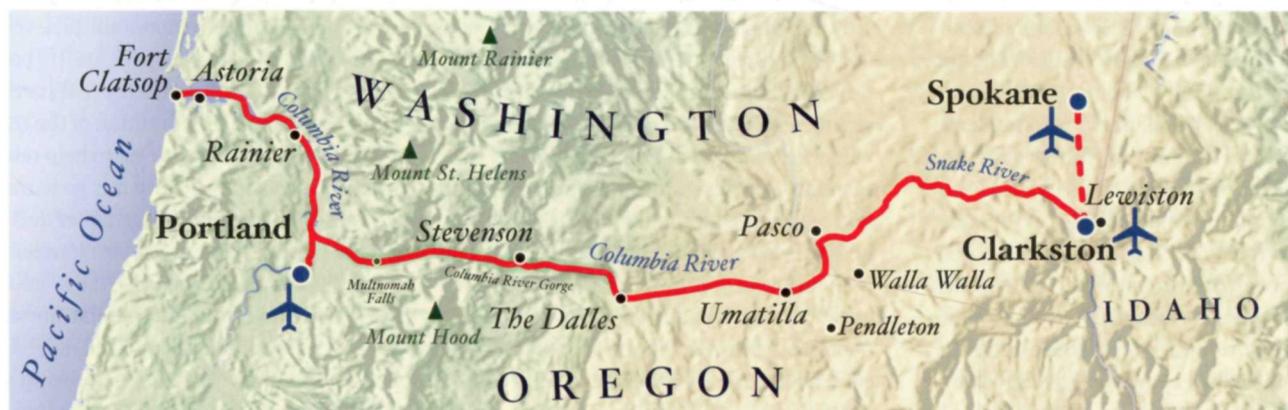
Paddlewheel Cruising on the Columbia and Snake Rivers

~ 7-night cruises ~



From the high desert landscapes to the endless sweep of the Pacific Ocean, the Columbia and Snake rivers follow an epic course, flowing through a rich tapestry of ever-changing landscapes, lush wildlife habitats and a lock system which raises

the ship 780' over 8 locks. Local experts, Native American performers and perfectly planned shore excursions heighten each experience. Join us for an unforgettable 7-night cruise along the legendary rivers that helped shape the American West.



Reservations office open 7 days a week

Toll-free **1-800-814-6880**



U.S. East Coast Waterways & Rivers • Mississippi River
U.S. Northwest Rivers • Alaska Inside Passage



A FORK IN THE TRAIL

It's hard for mountain bikers to become full-throated advocates of the land-conservation movement when they are considered second-class citizens at best ["Wheels of Change," Spring]. But from my perspective, the land-protection movement could use more members within its ranks. Mountain biking is silent, human-powered, and by every credible study available, has the same impact as hiking (with the single exception that mountain bikers rarely go off trail). As a group, we don't feel as if we have to ride everywhere—we advocate for access on a case-by-case basis. Still, there are many within this debate that would have you believe that we must choose between land conservation and mountain biking. That is a false choice. The real choice is between land conservation/protection versus development/extraction—and once we agree that that's the real issue, silent recreationalists of all stripes can join hands in support of a unified and sensible goal.

MIKE McCORMACK
via www.npca.org

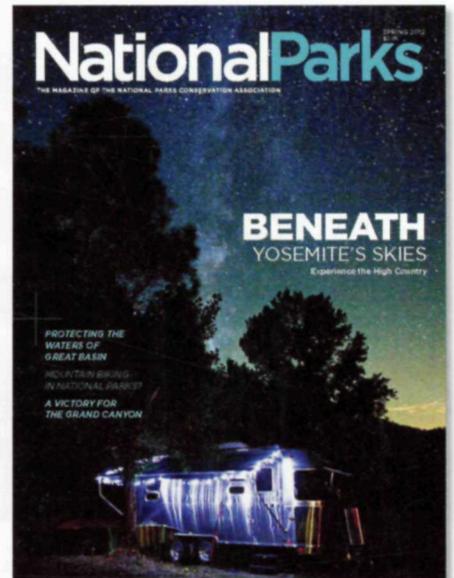
In response to the question posed in "Wheels of Change," "Do knobby tires belong on national park trails?" The short answer is, "No, they do not." The primary purpose of national parks is to preserve our natural heritage for future generations. Only those activities (such as the quiet contemplation of nature) that are compatible with this primary purpose are appropriate in national parks. Bikes are mechanized vehicles—even though human powered—and intrude upon the national-park experience through the suddenness of their appearance on trail. Only if completely separated from other trail users should bikes be allowed in national parks, and only where conditions can support bike traffic without harm to the environment.

"BOB"
via www.npca.org

I appreciate that some trails are too crowded already and others are simply not suitable for mountain biking—but I refuse the elitist thought process that creates a blanket ban on mountain bikes in wilderness and on national park trails. By selecting and designing appropriate trails and regulating mountain bike usage, limited off-road cycling should be able to occur with minimal disruption to the land and other visitors. You don't have to open the floodgates, but you can work to allow a controlled stream of us in.

"RH"
via www.npca.org

A few things to keep in mind about mountain bikers: First, they travel farther, faster, so they are not concentrated at a handful of trailheads (looking at you, Shenandoah National Park—only 5 percent of your visi-



tors actually leave their cars). Mountain bikers are not going to go off trail, and most are not interested in running over vegetation (tires go flat that way). They can be a valuable monitoring resource for parks (my local open space uses mountain-bike volunteers to help monitor the park and its users). By and large it is a community that cares immensely about the condition of the trails, and they are some of the first to help rebuild an area (if you don't believe me, go to the website of your local IMBA chapter and tell me you don't see a huge list of volunteer trail maintenance days). They also don't leave a mess in the middle of the trail like horses do. I myself am not a mountain biker—I am a hiker—but I have a great relationship with the outdoor enthusiasts that I share open space with. With obesity being our nation's big challenge, I say whatever gets people moving and engaged in our parks is a good thing, so long as it is done cooperatively and not with knee-jerk reactions.

"BONNIE"
via www.npca.org

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.

A WORK OF ART

I just received my new issue of *National Parks* and wish to express my admiration for such a wonderful publication! You have actually brought to my door a truly educational journey of places on my bucket list. Thank you for the great adventure, and for making this publication a work of art.

LINDA K. ASHER
Paragon, IN

Congratulations to all who contributed talent and time to the super-fine Spring issue. I was especially taken with all three features: "Hidden Yosemite," for the helpful information provided; "Sacred Water," for bringing attention to one of many urban areas facing acute water shortages and ill-advised "solutions"; and most of all, "Wheels of Change," for the balanced reporting of mixing mountain biking into the nation's parks, and the eye-catching artwork of Dung Hoang. If those powerful illustrations have not already become huge, framed art pieces for sale and exhibition, they should be.

NEIL CLEMONS
Spokane, WA

Christine Byl's account of "wintering over" in Healy, Alaska [Winter], is among the very best pieces of writing I have come across in any magazine—and I've been a magazine editor for 35 years. You put out a very good product.

NEAL BURDICK
Canton, NY

As a new subscriber to *National Parks*, I have been very impressed with the quality of the writing, illustrations, and photography. I travelled the Natchez Trace for the first time in the fall of 2011, and it was a

great treat to see it so well covered in the very first edition we received.

RICHARD P. REAM
Sanibel Island, FL

A CRITICAL BAN

Whether they know it or not, all Americans owe gratitude to NPCA, the Center for Biological Diversity, Grand Canyon Trust, and many individuals who succeeded in banning uranium mining for the next 20 years near the Grand Canyon ["Radioactive Proposal," Spring]. Aside from protecting water quality in one of the world's most beloved national parks, this victory will protect America's food supply, the water supply for millions of people, and habitat for millions of birds downstream from the Grand Canyon.

Protecting major rivers from radioactive pollution would seem a no-brainer, but it remains a struggle, as the Grand Canyon uranium mining battle has proven. Already the Columbia River is contaminated with plutonium from the Hanford Site, and the Rio Grande has some radioactive contamination from Los Alamos National Laboratory. Past uranium mining throughout the Rio Grande and Colorado watersheds touches these rivers.

In the case of the Colorado River, any uranium pollution could reach the water taps of 16 million people in Las Vegas, Los Angeles, Phoenix, San Diego, Tucson, and many smaller cities. The contaminated water could seep into irrigation canals in California's Central and Imperial Valleys, and even in Mexican agricultural areas. Contamination could also affect some of the most important migratory bird habitat in the Imperial Valley. It's all connected.

TOM RIBE
Santa Fe, NM

WATER WARS

I am very impressed with my first issue of *National Parks* magazine. The photographs are beautiful, the articles diverse, well-researched, and well-written. I would like to make a correction, however, to the caption of the photo on page 51 ["Sacred Water," Spring]: The obscenity depicted there is misidentified as "suburban sprawl." More accurately, it is a malignant tumor upon the face of the earth. The notion that this cancerous growth should be enabled and encouraged by taking water from the Indian tribes, ranchers, wildlife, and others who live in the Great Basin and depend on its resources is criminal and immoral.

JIM DAVIS
Avalon, NJ

Living and working in Southern Nevada has placed me very close to the conflict surrounding the Southern Nevada Water Authority's attempted water grab. While some businesses support the pipeline project, many of the citizens do not; citizens of Las Vegas have a solid understanding of the consequences of the pipeline.

In July 2011, a report by Channel 8 News in Las Vegas shared these sobering numbers: 8,000 acres of wetlands will be lost; 191,000 acres of shrub land wildlife habitat will be threatened, along with more than 300 fragile springs and 193 miles of streams; 24,000 tons of dust per year will be kicked up in newly created deserts; and critical habitat for antelope, deer, elk, sage grouse, trout, and dozens of other species—many endangered—will be severely affected.

This pipeline project must be stopped. If not, Nevada will end up being a large contributor to the already increasing dust storms.

GERALDINE AHRENS
via e-mail



Echoes

This is worse than misguided policy—it means that the people who have made a career of public land management are not in control."

Kevin Dahl, program manager in NPCA's Southwest regional office, quoted by the Houston Chronicle in response to a Congressional bill that would give the Department of Homeland Security complete control of all federal lands within 100 miles of the U.S. border, including portions of Big Bend, Glacier, North Cascades, and Organ Pipe Cactus (right).

There are plenty of public lands... that provide appropriate opportunities for hunting and recreational shooting. Yet, in the absence of a perceived national need to hunt squirrels in Frederick Douglass's backyard, or conduct target practice at the Gettysburg Cemetery... the House of Representatives has passed legislation that would seem to contemplate such ridiculous notions.

Craig Obey, NPCA's senior vice president of Government Affairs, quoted by Blue Ridge Now, regarding the House's rejection of an amendment to The Sportsmen's Heritage Act of 2012, which could result in virtually any park unit being opened to hunting, recreational shooting, trapping, or similar activities currently prohibited. Learn more on NPCA's blog: <http://bit.ly/nps-shact>.

Our national parks are supposed to be a safe haven for our iconic wildlife, not a free-fire zone.

Tim Stevens, director of NPCA's Northern Rockies regional office, quoted by the Grand Forks Herald in response to a proposed wolf hunt along the John D. Rockefeller Parkway, a park unit that links Yellowstone and Grand Teton. Learn more at: <http://bit.ly/wolfhuntwy>.





CHICAGO HISTORY MUSEUM

On the Right Track

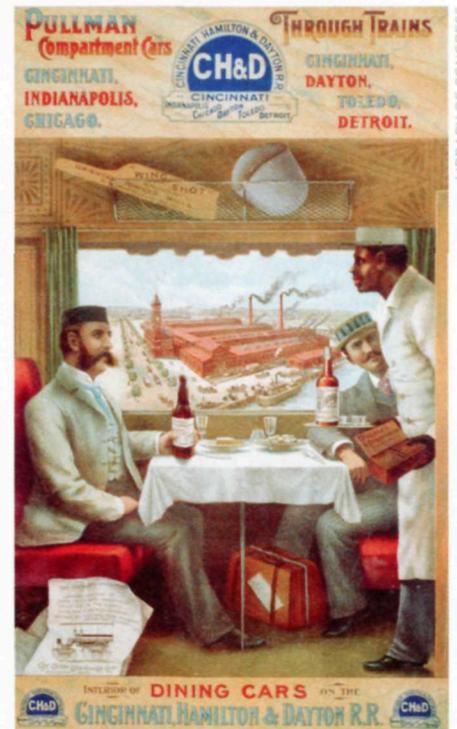
The hub of George Pullman's thriving railcar industry could become Chicago's first national park.

On a sunny and blustery spring afternoon, Arthur Pearson shows off his neighborhood of 16 years, Chicago's historic Pullman District, which could be the setting for the country's next national historical park.

Nestled in a semi-bucolic nook minutes west of the Dan Ryan Expressway on the city's far South Side (immortalized in Jim Croce's hit song "Bad, Bad Leroy Brown" as "the baddest part of town"), the neighborhood sprang up in 1881 to house about 12,000 laborers and other employees from railcar mogul George M. Pullman's Pullman Car Works. Residents had schools, theaters, a library, and parks at their disposal, and each one enjoyed indoor plumbing and gas service. Pull-

man's sprawling factory and administration building loomed nearby. Formerly the center of manufacturing and distribution for his upscale railcars, which became ubiquitous in late 19th-century America, the adjacent structures now sit empty and in various states of coddled disrepair just north of 111th Street.

After making his name by raising and relocating buildings in his native New York State and then in Chicago, Pullman partnered with a politician acquaintance and began converting railroad passenger cars into more comfortable traveling quarters. They were few and modestly appointed, though, compared with the scores of rolling luxury cabins Pullman would construct during the country's railroad boom. Beginning



LIBRARY OF CONGRESS

Pullman workers (top) created the first African-Americans labor unions. Above, an advertisement for Pullman compartment cars on the Cincinnati, Hamilton & Dayton Railroad.

“We could become the Grand Canyon of the South Side.”

—Rep. Jesse Jackson, Jr.

in the mid-1850s, the period of tremendous growth ramped up after the Civil War and continued into the early 20th century.

When Abraham Lincoln was assassinated in mid-April of 1865, one of Pullman's inventions squirmed the president's body back to Springfield, Illinois. Boosted in part by the considerable press attention that solemn journey garnered, business poured in as railroads leased more and more of Pullman's dining cars, sleeping cars, parlor cars, reclining cars, and hotel room cars. By the early 1890s, with roughly 2,000 of his railcars in use, his empire was worth a reported \$62 million.

Then came the so-called Panic of 1893 and an ensuing economic depression. Faced with a sharp decline in orders, Pullman was forced to slash wages and fire thousands of workers—which he did without instituting a corresponding drop in rent for those already feeling oppressed by his relentless price gouging and iron-fisted rule. When disgruntled Pullman employees went on strike in 1894, their angry defiance of Pullman's unjust labor practices spread nationally. Ultimately, 150,000 workers in 465 labor unions and 27 states joined forces to effectively shut down America's railroads. The interruption lasted only a few months. After national and state troops were marshaled to quell the unrest, more than a dozen people were shot dead and the protest ended.

In the years following the Pullman strike, the Brotherhood of Pullman Porters

was established, creating the first African-American labor union and producing jobs that helped fuel the migration from the South to northern cities.

Today, the tree-lined and sporadically rehabbed residential quarters of the Historic Pullman Landmark District are relatively vibrant. As Pearson, a community activist and a member of the Pullman Civic Organization, stands before the expansive Florence Hotel, a worker shouts down to a cohort from the high slate rooftop, and heavy equipment is parked near mounds of gravel. Owned since 1991 by the state of Illinois and named for Pullman's favorite daughter, the Florence is supposedly nearing the end of a multi-million-dollar, years-long transformation. When it's finally finished, Pearson says, the site is poised to be one of Pullman's chief visitor attractions.

Pullman is already one of 2,500 sites designated as national historic landmarks, and Pearson and others envision vast improvements to the neighborhood if it becomes Chicago's first national park. Rep. Jesse Jackson, Jr., whose district encompasses the entire Pullman neighborhood, recently introduced a resolution to the House of Representatives calling for a feasibility study, the first step toward a park's creation. Pullman boosters cite the textile mills of Lowell National Historical Park in Massachusetts as a model for a historic manufacturing industry that has infused life into a neglected urban area. A more grandiose comparison came from Jackson himself, who declared, “We could become

the Grand Canyon of the South Side.” Or at least, perhaps, the Colonial Williamsburg.

Lynn McClure, director of NPCA's Midwest regional office, wonders how Chicago has held out for so long. “Not to have a national park presence in the third-largest city in this country is terrible,” she says. “There is so much history in Chicago, and the important and unique stories at Pullman are just waiting to be retold by the best storytellers in the country: the National Park Service.”

In the meantime, hopeful locals say, there's a perception problem to overcome. Lionel Kimble, who grew up in Chicago and teaches its history at Chicago State University, is one of those locals. “Many people see the South Side of Chicago as a location for violence, crime, gangs, and the like,” he says.

And parts of it do indeed fit that description—including areas that abut Historic Pullman, whose relative safety, commutability, and atypical cohesiveness Pearson touts. As he strolls past a lawn-mowing resident, he smiles and shouts a hello. Then he's on to the Greenstone Church, with its copper spire and tiny congregation, before coming to a stop outside the restored late 19th-century brick home of Michael Duck. A veteran Chicago beat cop, Duck has lived in the Pullman District since 1974, and believes national park status seems like “a real benefit.”

While even Pearson is unsure if Jackson's House resolution is ever going to get out of committee, he nonetheless envisions a brighter future for his longtime home. “What we're hoping for with a national park is a little better master planning and the identifying of what partners are available to help us develop the critical pieces,” he says. “But it's not going to happen overnight.”



ILLUSTRATION BY DUNG HOANG

LITTLE BIGHORN IS STRUGGLING to tell the story of the well-known battle that pitted Lt. Col. George A. Custer against Sitting Bull and Two Moons, below.

One More Casualty at Little Bighorn?

A battlefield in southern Montana details the fall of George Custer, the end of the American Indians' way of life, and the crippling decline of the Park Service budget.

Deep in south-central Montana, just off Route 212, lies Little Bighorn Battlefield National Monument, the site where 263 soldiers from the U.S. Army's 7th Cavalry fought thousands of Sioux and Cheyenne warriors in June of 1876, a battle commonly referred to as "Custer's Last Stand." In 1874, when gold was discovered in South Dakota's Black Hills—the heart of the Great Sioux reservation—thousands of prospectors swarmed into the region. Eventually, the Lakota and Cheyenne left the reservation and started raiding settlements on the fringes of their land. The commissioner of Indian Affairs ordered the tribes to return to the reservation, and

when they didn't comply, the army was called in to enforce the order. The park tells the story of Lt. Col. George A. Custer's fight against Sitting Bull, Crazy Horse, Lamé White Man, and Two Moons, who won the two-day battle but would soon lose the war to preserve their way of life.

Nearly 140 years later, the Park Service is struggling to tell that story. Here in the shadow of Yellowstone, Little Bighorn faces a painful number of funding challenges, revealed in a Park Service report from 2010: "The 58-year-old visitor center is too outdated and cramped to comprehensively convey one of the most important stories in American history and Plains

A Losing Battle

"When the visitor center was built in 1952, about 100,000 people visited the park every year. But visitation has tripled since then, currently averaging about 300,000 people per year. The park has no auditorium or large meeting room, and until 2008 it used a dingy basement storage room to show the park film; that practice was stopped because the space wasn't handicapped accessible and it posed safety issues. To hear a ranger program, visitors gather on a patio that's not big enough to hold typical seasonal crowds of 100 to 150 people."

SOURCE: Little Bighorn Battlefield National Monument: Critical Issues and Opportunities for the 21st Century, National Park Service, 2010

EDWARD S. CURTIS/
LIBRARY OF CONGRESS



For All They Are...

**Playful
Defenseless
Gentle
Wonderful**



**Help Protect Them,
Adopt-A-Manatee.**



Call 1-800-432-JOIN (5646)
www.savethemanatee.org

The Voice for Manatees Since 1981

Photo © David Schrichte

**FREE
SHIPPING**
For a Limited Time



Self-Propelled Model Available!

**THE EASIER
WAY TO TRIM
AND MOW!**

The original, patented
DR® TRIMMER/MOWER
is both a precision trimmer
and a powerful mower!

TRIM within a whisker of houses, trees, fences. Big wheels make it easy for anyone to control precisely!

MOW WITHOUT FEAR of hitting rocks or hidden obstacles, because there's no blade to bend or dull.

GUARANTEED NOT TO TANGLE even in thick, waist-high field grass and weeds — thanks to its patented No-Wrap Trimmer Head. Plus, there's no enclosed deck to clog, as with ordinary mowers.

CUT UP TO 3"-THICK BRUSH with optional, patented Beaver Blade® Attachment.

75211X © 2012 CHP



Call for a **FREE DVD & Catalog!**

TOLL FREE **1-877-202-1245**

www.DRtrimmer.com



**Genuine Custom
Amish Built
LOG CABINS**



**Great Hunting Camp
& Weekend Getaway!**

Grown & Built in the USA

248-459-2716

TrophyAmishCabins.com



**NATIONWIDE, TURN KEY,
DELIVERY!**

AMERICA THE beautiful

Canyon Country

9 Days • 13 Meals **from \$2049***

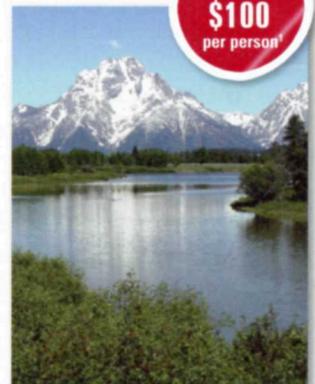
Highlights: Scottsdale, Grand Canyon, Lake Powell, Bryce Canyon National Park, Zion National Park

National Parks of America

12 Days • 17 Meals **from \$2899***

Highlights: Scottsdale, Grand Canyon, Bryce, Zion, Grand Teton & Yellowstone National Parks, Mount Rushmore

Also available: Canyon Country Family Adventure and The Wild West & Yellowstone Family Adventure



**SAVE
\$100
per person**

The Difference Starts at Your Door

Receive complimentary roundtrip home to airport sedan service on all air-inclusive tours.†



**COLLETTE
VACATIONS**

Contact your travel agent or call us at **877-961-8687**.
Mention promotion code H194-AX1-918.
Visit www.collettevacations.com/npm06

*Rates are per person, land only, based on double occupancy. †Not valid on group travel. Included in many U.S. cities within a 50 mile radius of more than 90 airport gateways. One transfer per room booking. Additional stops are not permitted on route. For parties of 3 or more alternate vehicles may be used. Other restrictions may apply; call for details. †Offer valid on new bookings only made between 6/29/12 - 9/30/12 for travel between 6/29/12 - 12/31/12. Offers can expire earlier due to space or inventory availability. Space is on a first come, first served basis. Offers are not valid on group or existing bookings or combinable with any other offer. Other restrictions may apply.

CST# 2006766-20 UBN# 601220855 Nevada Seller of Travel Registration No. 2003-0279



“I lie awake at night worrying about irreversible harm or catastrophic loss.”

—Kate Hammond, former superintendent, Little Bighorn Battlefield National Monument, *Billings Gazette*, April 2011

Indian history. The monument’s roads and parking lot are in bad shape and woefully inadequate for today’s traffic. Thousands of artifacts and documents stored at the site are poorly protected.”

An illustration of just how bad things got: Last June, park employees hurriedly grabbed artifacts including soldiers’ uniforms and letters signed by President Lincoln, barely saving them from water pouring down the basement walls as the Little Bighorn River crested its banks. Now those icons of American history sit in a storage facility in Tucson, Arizona, where park visitors, tribe members, and researchers have little opportunity to lay eyes on them.

Little Bighorn is one of the smaller park units in the system, but its impact on the region’s economy is significant. Park Service data from 2008 show that the site generated 187 jobs in the region and \$10 million for local businesses. “More than 300,000 people visit this monument annually... and these people purchase fuel, food, souvenirs, and accommodations in [local communities],” says John Brewer, executive director of the Billings Area Chamber of Commerce. “If the monument were to be closed, or if it no longer had the ability to meet the needs of its visitors, the impact to the local economy could be severe.”

“This is a huge piece of America’s cultural tapestry, yet the park is a poster child for funding shortfalls affecting all of our national parks,” says Tim Stevens, director of NPCA’s Northern Rockies region. “Back in 2003, NPCA issued a report on Little Bighorn and found some very troubling issues relating to the condition of the park. Unfortunately, almost ten

years later, most, if not all of those issues have yet to be addressed.” And that’s unlikely to change anytime soon, given the nation’s broader economic challenges.

“Although our country is facing worrisome deficits and a struggling economy, in the case of our national parks, we don’t need to choose between austerity and jobs,” says John Garder, budget and appropriations legislative representative for NPCA. “The parks are proven economic engines that constitute only one-thirteenth of one percent of the federal budget. Recent polls show national parks are among the most popular federal benefits and that people want them funded, yet they could be further damaged if they are neglected during the current budget debate.”

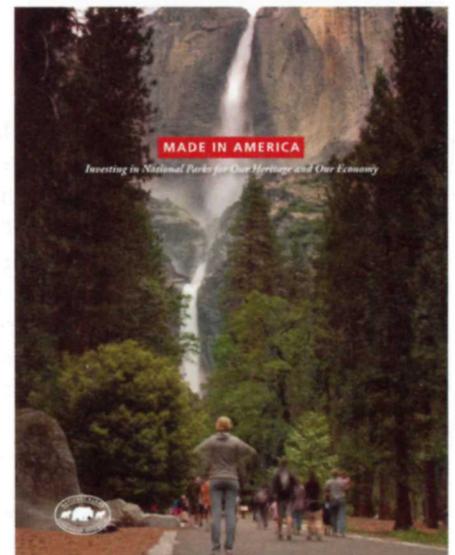
Meanwhile, a tourism task force appointed by President Obama just released a report encouraging federal agencies to work with the private sector to welcome 100 million international visitors to the United States, in the hope that they would spend as much as \$250 billion annually by the end of 2021. The task force, which includes representatives from the Departments of Interior, Commerce, Treasury, and Labor, points out that park rangers are among America’s most recognizable and beloved public figures and notes that “when travelers visit a federally-managed site—such as a national park, refuge, marine sanctuary, or forest—the U.S. government gains a unique opportunity to create an unforgettable experience.” True enough. But if park budgets are slashed, those experiences may be unforgettable for entirely different reasons.

“If we’re going to invite international travelers to visit our parks, we need to

make sure there are rangers there to greet them,” says Garder. “Little Bighorn is a great example of the disrepair that impacts the tourism experience, and it’s symptomatic of the \$11 billion maintenance backlog that threatens the resources people come to enjoy. Unless Congress can find a way to address across-the-board spending cuts scheduled for January, parks will get an unprecedented 8-9 percent cut, which would mean a damaging reduction in park rangers. It’s just good economic sense to focus on the assets that draw people who invest in our economy, while supporting the countless businesses located near so many national parks.”

Last November, NPCA published *Made in America* (below), a report that identifies threats to specific parks like Little Bighorn and the possibility of even more dire consequences if Congress cuts the Park Service budget yet again, as many fear. (Learn more at www.npca.org/madeinamerica.) Want to get involved? Sign up for NPCA’s activist alerts at www.npca.org/takeaction and contact your senators and representative directly, urging them to preserve park funding.

— SCOTT KIRKWOOD



1,500 ONLY AVAILABLE



It's a first. It's silver. It's patriotic. And it's a steal.

Washington crossing the Delaware.
Eisenhower launching D-Day. Kennedy
rescuing the crew of PT 109.

These men made history.

This set made history

To celebrate the bicentennial of America, the U.S. Mint struck this special three-piece proof set honoring these three American presidents—and our 200th birthday. To capture the bicentennial spirit, the coins in the set are dual-dated 1776–1976.

This set was so popular over 4 million were sold.

Unlike the regular circulating coins of the day, the coins in this set are struck in precious silver.

It's the first commemorative U.S. Mint Proof Set ever. It's also the first proof set to feature all dual-dated coins. And finally, it's the first U.S. Proof Set to include a Silver Dollar. Americans love proof coins from the U.S. Mint. Each is

struck twice from specially prepared dies and has deeply-mirrored surfaces and superb frosty images.

And you know you've got a *real piece of American history* when you hold this set—the red white and blue holder is spectacular!

Now for the steal part...

This first-ever Bicentennial Silver Proof Set sold out at the mint three decades ago. When you consider how much prices have risen since then, you might expect to pay \$100 *or more* to buy this set today.

But for this special offer, we are releasing our entire stock of Bicentennial Silver Proof Sets for only \$49 each. *Or better yet, buy five and pay only \$39 each!*

Order now risk free

We expect our small quantity of Bicentennial Silver Proof Sets to disappear quickly at this special price. We urge you to call now to get yours.

You must be satisfied with your set or return it within 30 days of receipt for a prompt refund (less s&h).

Buy more and SAVE

1776-1976 Bicentennial Silver
Proof Set \$49 + s/h
5 for only \$39 each + s/h

SAVE \$50

Toll-Free 24 hours a day

1-800-558-6468

Offer Code BPF186-02
Please mention this code when you call.

 **GOVMINT.COM**
YOUR ONE BEST SOURCE FOR COINS WORLDWIDE

14101 Southcross Drive W.
Dept. BPF186-02
Burnsville, Minnesota 55337
www.GovMint.com



Prices and availability subject to change without notice. Past performance is not a predictor of future performance.

Note: GovMint.com is a private distributor of worldwide government coin issues and is not affiliated with the United States government. Facts and figures were deemed accurate as of March 2012.

©GovMint.com, 2012



A Breath of Fresh Air

EPA is renewing its vow to protect our most sacred views.

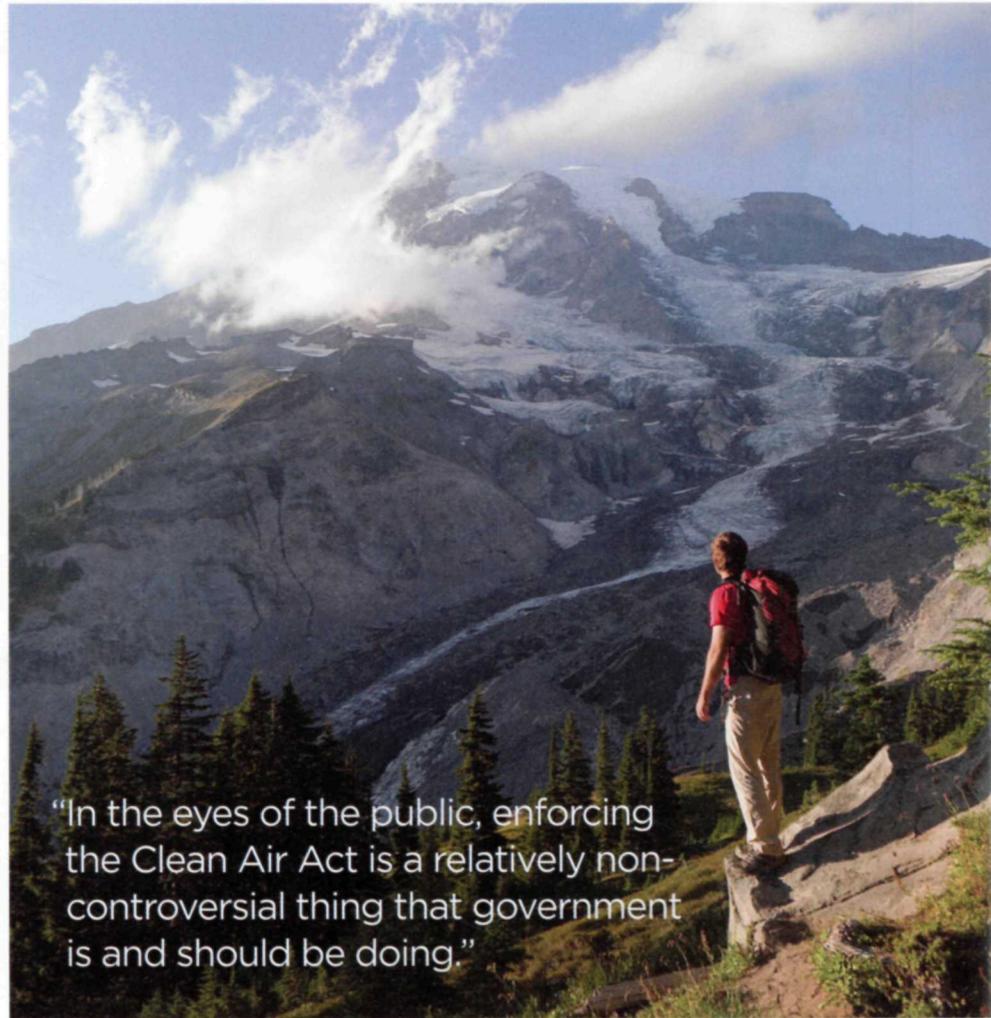
If you've ever found yourself gazing out at a national park and struggling to see through the haze, take heart. Those vistas could clear up significantly in the years ahead.

This March, a U.S. District Court approved a landmark agreement, or a "consent decree," between the Environmental Protection Agency (EPA) and a coalition of clean-air advocates led by NPCA. The decree establishes firm, enforceable deadlines for cleaning up air pollution in national parks and wilderness areas in 35 states, the District of Columbia, and the Virgin Islands.

It's been a long time coming. In 1977, Congress adopted, with sweeping bipartisan support, a program to protect visibility in these sacred landscapes in amendments to the Clean Air Act. But as is often the case with environmental initiatives, progress has been slow. The powerful coal industry persisted in its lobbying efforts. Administrations changed, and progress made by one president stalled under another. The EPA became so busy trying to regulate air quality in urban areas that national parks took a back seat. And when the agency finally set a deadline of December 2007 for states to submit plans to eliminate haze in the national parks, states either missed the deadline or submitted inadequate proposals.

"These issues don't always get resolved with one lawsuit or one session of Congress," says Mark Wenzler, who leads NPCA's national clean air and climate programs. "Sometimes it takes a generational commitment, especially when you're deal-

A YOUNG MAN HIKING in Mount Rainier National Park, Washington, one of many parks poised to make significant strides in air quality in the coming years.



"In the eyes of the public, enforcing the Clean Air Act is a relatively non-controversial thing that government is and should be doing."

JUSTIN BAILIE/AURORA PHOTOS

ing with such powerful adversaries. Almost all advocacy unfolds this way. The big stuff is messy, and it can take a long time, but NPCA has been there at every turn—building coalitions, fighting off delays, and filing lawsuits when necessary."

Recently, however, the floundering economy has put clean-air regulators in a tricky position. No government official wants to be perceived as imposing pricey regulations during a national recession, no matter the long-term benefits.

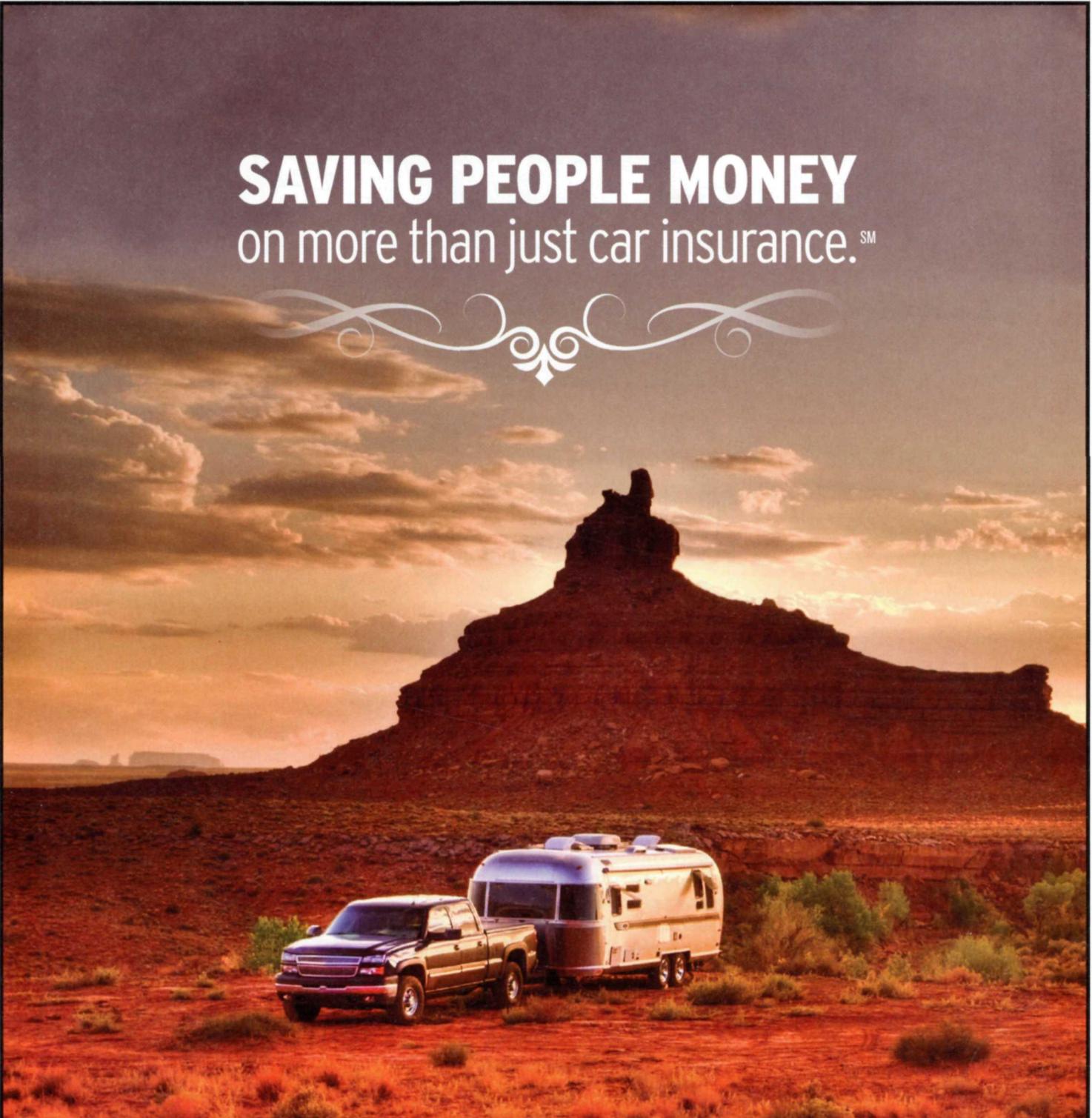
"When the economy's in a fragile state, it's really easy to attack the EPA for over-regulating the economy, raising electricity

prices, and cutting jobs," says Wenzler. "It's an unfortunate perception, because the EPA has done none of these things. In fact, we've seen time and again that industry is able to make pollution cuts in a cost-effective manner that does not harm consumers."

"It's just a scare tactic," adds Dave Norris, former mayor of Charlottesville, Virginia, located about 20 miles outside Shenandoah National Park. "The truth is, quite a few jobs would be created in the process of retrofitting some of these plants, and quite a few jobs would be preserved in the process of cleaning the air in our national parks. And when you consider the impacts

SAVING PEOPLE MONEY

on more than just car insurance. SM



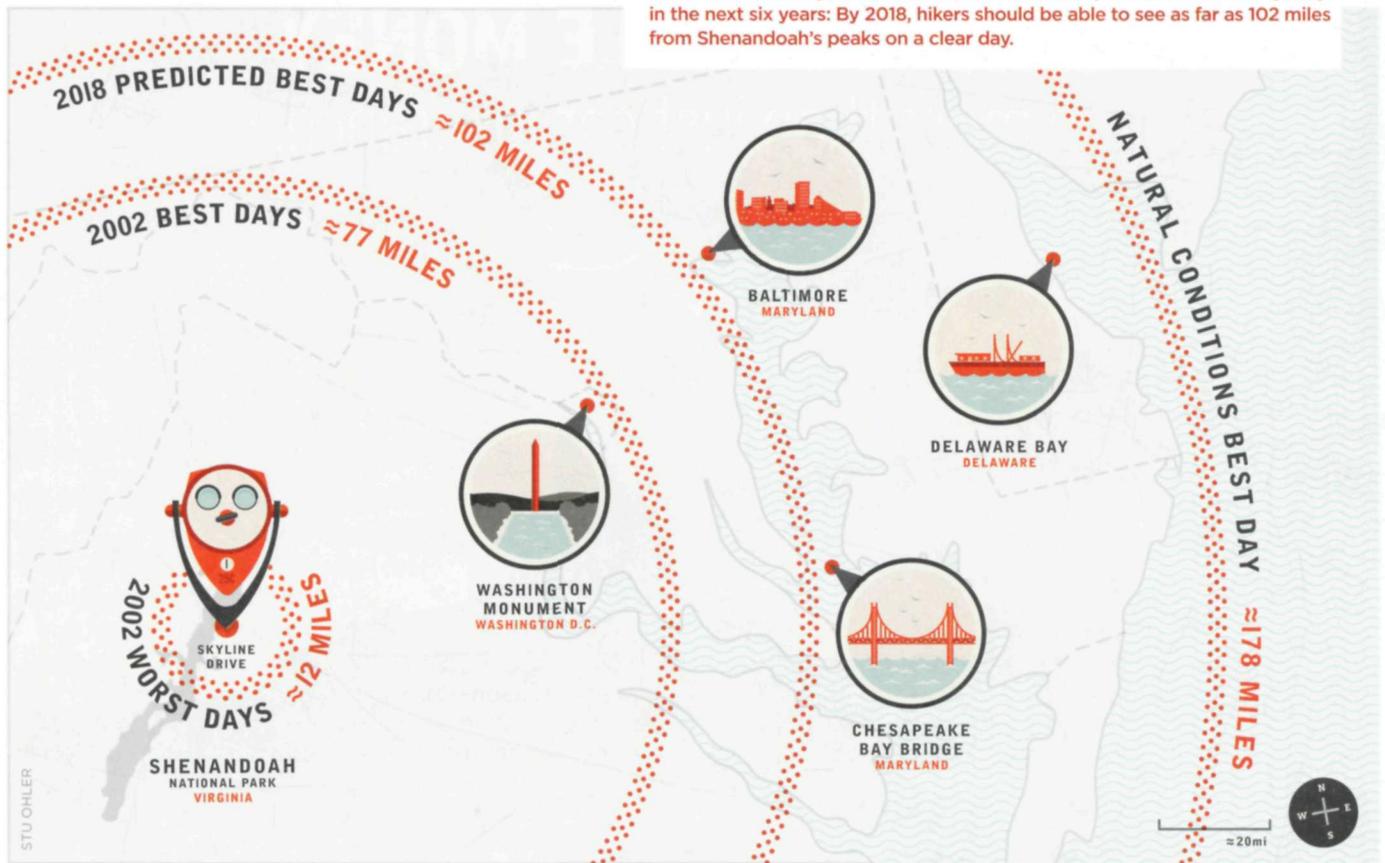
GEICO[®]

Call 1-800-442-9253 today • or visit your local office.

Some discounts, coverages, payment plans and features are not available in all states or all GEICO companies. Motorcycle and ATV coverages are underwritten by GEICO Indemnity Company. Boat and PWC coverages are written through non-affiliated insurance companies and are secured through the GEICO Insurance Agency, Inc. GEICO is a registered service mark of Government Employees Insurance Company, Washington, D.C. 20076; a Berkshire Hathaway Inc. subsidiary. © 2012 GEICO



IN 2002, HIKERS IN SHENANDOAH could see only 12 miles on a hazy day, and 77 miles on a clear day. EPA's consent decree will help lead to better air quality in the next six years: By 2018, hikers should be able to see as far as 102 miles from Shenandoah's peaks on a clear day.



to human health and the costs required to treat the medical conditions caused by dirty air, there's actually going to be a net benefit for our country [\$8.4 to \$9.8 billion annually in saved health-care costs by 2015, according to the EPA]. So we can't listen to the fear tactics and the naysayers—we've just got to do the right thing."

For years, NPCA and its allies were involved in litigation seeking to force the EPA to implement the Clean Air Act's visibility protection program. Then, last fall, Norris and other clean-air advocates from around the country joined NPCA in Washington, D.C., to encourage EPA officials to set firm deadlines and ensure that state plans actually resulted in better air quality in the parks. "The staff we met with agreed that the Clean Air Act needed to be fully enforced, but they were feeling pressure in certain quarters on Capitol Hill to weaken the law," Norris says. "Essentially, our message was, 'We've got your back. We want you to stand strong and do the right

thing, and you've got people all over the country who are going to support you, even if it means taking on the more powerful opposition.' In the eyes of the public, enforcing the Clean Air Act is a relatively noncontroversial thing that government is and should be doing."

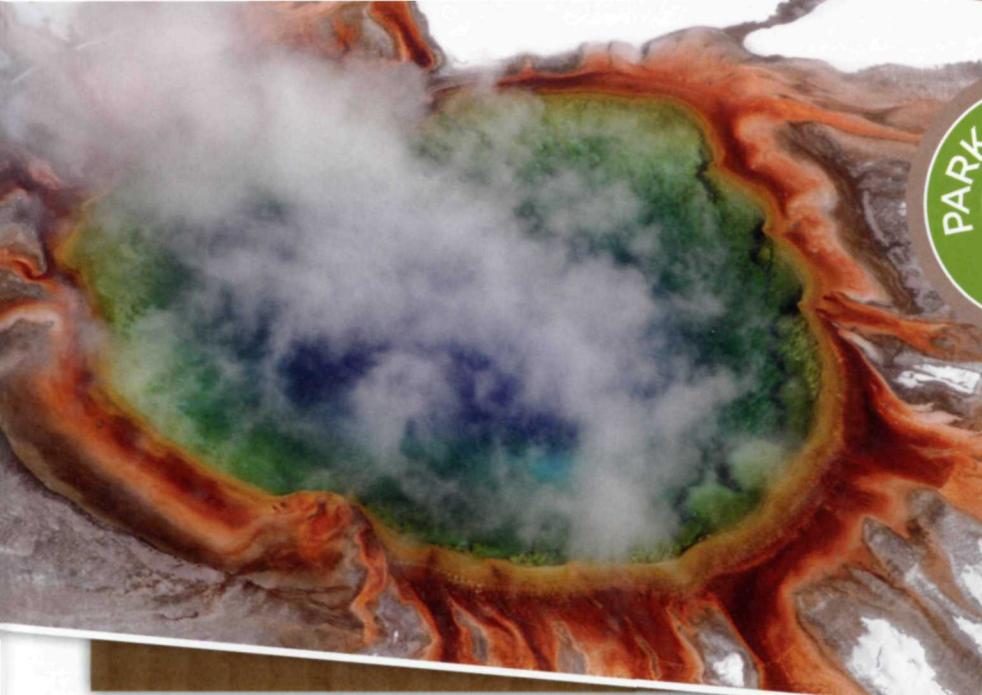
The consent decree isn't the only victory worth noting. Some park units have already begun to see improvements. Consider Mount Rainier National Park in Washington: In 1972, the nearby Centralia power plant began emitting dangerous levels of sulfur dioxide—a pollutant that blankets vistas and threatens the health and balance of plants and animals. So in 1995, staff from Mount Rainier invited a wide range of stakeholders—including the owners of the power plant—to come together and figure out how to protect the park. After 18 months, they reached a consensus: The power plant would reduce sulfur dioxide emissions by 90 percent.

It was a huge victory, but the fight to

protect parks in the Northwest isn't over. The same Centralia power plant is still emitting harmful amounts of nitrogen oxide, which contributes to haze and threatens the health of high-altitude ecosystems. Then in April 2011, as part of a stakeholder negotiation process involving NPCA, Centralia agreed to retire one of its coal units in 2020 and the other in 2025; the plant also will install new technology by 2013 to reduce nitrogen oxide.

A handful of other states have already proposed promising plans, but there's still plenty of work left to do. "Because of this consent decree, we could start to see major changes over the next several years," Wenzler says. "It's not going to happen by itself—we have to continue advocating for strong plans in each of these states—but we have the law and firm deadlines on our side. We're turning a corner to a much brighter future for the national parks, and NPCA is at the epicenter of it."

—AMY LEINBACH MARQUIS



ParkScapes Travel
 Iconic experiences within America's national parks and monuments, highlighting special access to park experts. Trips showing the swan logo have alternate park tour dates through our preferred partner, Off the Beaten Path.



PARKSCAPES: 2013 TRIP SCHEDULE

Utah Canyon Lands: Zion, Bryce, and Escalante April 2013



Experience the beauty of Cedar Breaks, Bryce Canyon, and Zion National Parks. Spring-fed creeks, deep canyons, hoodoos, spires, arches, and towers.

Springtime in Yosemite May 2013



Melting snow roars over the otherwise delicate waterfalls, dogwood bloom in the famed Yosemite Valley, and giant sequoia stand witness to it all.

Parks of the World: Galápagos Islands June 2013

• *Cruise* • This year's comparative study takes you to the Galápagos Islands, where 97 percent of the land is protected by a national park.

Isle Royale Wilderness Sojourn July 2013

Isle Royale National Park is a road-less wilderness island accessible only by boat or float plane, and home to world's oldest wolf-moose interaction study.

The Grandest Canyons: Family Adventure August 2013



Introduce your children or grandchildren to America's best places; this family-friendly itinerary is full of grand adventures. Hike Zion and Grand Canyon National Parks and much more.

Historic Lands, Landmarks, and Locomotives August 2013

Traverse the mountains of Colorado in their most colorful season—taking in the towering peaks of Rocky Mountain, sheer-walled canyons of Colorado National Monument, and cliff dwellings at Mesa Verde.

Tallgrass Prairie & Flint Hills September 2013

Meander the preserve's trails through eight-foot-tall grasses and late-season wildflowers.

Past Patriots & First Presidents October 2013

Relive the American Revolution's defining events with renowned historians, from Bunker Hill to Valley Forge.

Exploring Hawaii's National Parks November 2013

Observe the natural beauty of volcanic activity and marine life. Immerse yourself in Hawaiian culture.



New Year's in Yellowstone December 2013



Wildlife viewing in transformed snowy landscapes of the world's first national park.

To get full tour details or make a reservation, call toll-free at 800.628.7275, email travel@npca.org, circle ParkScapes on your reader services insert card, or visit www.npca.org/travel.





PHOTOS BY CARLTON WARD



CARLTON WARD, JR. (BELOW), spent 100 days traversing the state of Florida, meeting with ranchers and others who hold the key to preserving wildlife habitat.



A Thousand Miles in a Hundred Days

Photographer Carlton Ward, Jr., leads a team of explorers on an ambitious, self-propelled journey through the Everglades and beyond.

They could hear the traffic streaming on Interstate 4, miles before it came into view. By the time they reached the bustling four-lane highway outside Orlando, Florida, the noise was deafening.

Now they just had to figure out how to cross it without getting killed.

"The highway was scary to us as humans," says photojournalist Carlton Ward, Jr. "I can only imagine how scary it must be to an animal that doesn't understand these things."

Ward was 70 days into the Florida Wildlife Corridor Expedition—a 100-day, 1,000-mile trek tracing the Florida peninsula's last viable wildlife corridor.

Starting from Everglades National Park on January 17, Ward and bear biologist Joe Guthrie, conservationist Mallory Lykes Dimmitt, and filmmaker Elam Stoltzfus followed the routes of wandering black bears and endangered Florida panthers by foot, horseback, mountain bike, kayak, and paddleboard. They camped in remote areas far from major roads and most of Florida's residents. They became accustomed to having entire landscapes to themselves.

On March 25, they were scheduled to meet with university researchers and Florida Forest Service employees to discuss wildlife underpasses—and that meeting happened to be on the other side of I-4.

Which, of course, lacked a bridge or underpass that would allow them to cross safely. By waiting patiently, dashing through gaps in traffic, resting and regrouping in the median, then dashing through traffic again, the team made it in one piece. And they were relieved later to learn that the Department of Transportation has plans to install three new underpasses beneath this very stretch of I-4 in the next few years, when it expands the highway from four to six lanes.

Before Florida became known as the Sunshine State, it was labeled by homesteaders as "The Land of Good Living," and in the last 50 years, people took that



WE AGREE.

Chevron is proud to support the mission of the National Parks Conservation Association.

The places we work are also the places we live. So we work to preserve the environment wherever we operate. In Australia, we've safely produced oil in a Class A Nature Reserve for nearly 45 years. Protecting the environment is always at the forefront of our minds. Because it only makes sense to take care of our home.

Learn more at chevron.com



Human Energy[®]

An equal opportunity employer that values diversity and fosters a culture of inclusion. CHEVRON, the CHEVRON Hallmark and HUMAN ENERGY are registered trademarks of Chevron Intellectual Property LLC. © 2012 Chevron U.S.A. Inc. All rights reserved.

SUMMER 2012

NationalParks

FREE INFO FOR YOUR NEXT ADVENTURE!

Learn more about the advertisers featured in *National Parks*. Simply fill out the attached card and return to us. We'll handle the rest! For faster service, fax toll-free to **888.847.6035** or visit npca.org/magazine and click "search advertisers."

Circle the number on the attached card that corresponds to your categories and advertisers of interest.

Circle #..... Page #

100. All Resorts & Hotels

- 1. Forever Resorts25
- 2. Kennicott Glacier Lodge.....61

200. All Travel & Tour

- 3. American Cruise Lines..... 5
- 4. Collette Vacations13

5. The Maine Windjammer Assoc.....61

6. NPCA Parkscapes Tours.....19

7. Williston.....61

8. YMT Vacations61

300. Outdoor Gear

9. Celestron Telescopes.....37

600. All Home

10. GEICO..... 17

11. Trophy Amish Cabins.....13

ADVERTISING SALES CONTACTS:

Jason Vranich

800.501.9571 x185 | jason.vranich@theYGSgroup.com

Marshall Boomer

800.501.9571 x123 | marshall.boomer@theYGSgroup.com



© Katelyn | Dreamstime.com



“One of the best things you can do to restore the Everglades and sustain wildlife corridors is to help working ranches stay in business.”

idea quite seriously, flooding the state in record numbers and driving the population to an all-time high of 19 million. “Until the recent recession, we had a net of 1,000 people a day moving into our state, and it’s led to a projected doubling of our population by 2060,” says Ward, an eighth-generation Florida native. “We’ll build a highway, and then we’ll widen the highway, and development just sprawls out on either side. It’s really encroached on the natural landscape.”

And that poses problems for Florida’s wildlife, which needs plenty of room to

roam. Protected areas like Everglades National Park provide critical refuges, but some animals require much larger spaces to survive. Consider one collared bear, which in just two months traveled 100 miles south to north before traversing more than 500 miles within the Northern Everglades, or the panther that made it all the way from the Everglades to the Georgia border, where it was shot dead by a hunter.

Healthy, connected landscapes don’t just benefit wildlife leaving the park—they benefit the park itself, whose health is affected by factors outside its boundaries. “It’s a unique

ecosystem,” says Don Jodrey, senior advisor to the assistant secretary for Fish and Wildlife and Parks. “The purity and availability of its water depends on the watershed much farther north than the area that was set aside as Everglades National Park.”

Despite increasing development pressures, there’s a spirited group of residents who understand this, and they’re growing in number and political strength. Meet Florida’s ranchers: protectors of some of America’s best remaining savannahs, and a minority that’s critical to Florida’s historical and cultural identity. (Because two-thirds of Florida residents weren’t born in Florida and roughly 90 percent live near the coastline, most are unfamiliar with the state’s interior landscape and the need to protect it.)

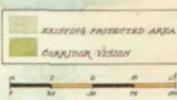
As part of the expedition, Ward’s team stayed with and interviewed 23 ranchers, many of whom are managing huge plots of land that have been in their families for more than 100 years. “These multigenerational ranches are the backbone of the rural economy, provide excellent wildlife habitat, and provide significant wetlands benefits,” Ward says. “So one of the best things you can do to restore the Everglades and sustain wildlife corridors is to help working ranches stay in business.”

And they need the help. As older ranchers pass away, their children are left with the burden of estate taxes; often, Ward says, the family has to sell off as much as half its land to meet those tax obligations. “Time and time again, we’re realizing that these landowners are committed to their land and their way of life, but they’re also holding on by a shoestring,” Ward says.

Thankfully, a conservation tool common in the West is starting to take hold in the East: conservation easements. Say that a farmer is struggling to pay the bills on his 10,000-acre ranch. By establishing a conservation easement, that farmer sells his rights to develop his land to the state or federal government in exchange for gov-

FLORIDA WILDLIFE CORRIDOR EXPEDITION

FLORIDA WILDLIFE CORRIDOR



A MAP ILLUSTRATES the 1,000-mile journey undertaken by Ward, cinematographer Elam Stoltzfus, biologist Joe Guthrie, and conservationist Mallory Lykes Dimmitt.



What Will YOUR Legacy Be?

"I'm not rich, but I want to leave something to those who are working so hard to protect the environment, like NPCA. I made this gift because I want these beautiful natural places preserved for future generations."

— Alida Struze, Ohio

Join Alida Struze and hundreds of other park lovers who promised to protect our national treasures for future generations by including the National Parks Conservation Association in their will or trust. Create a legacy that will last beyond your lifetime.



To receive our free brochure, *How to Make a Will That Works*, call toll-free 877.468.5775, visit our web site, www.npca.org/giftplanning, or return the form below.



Please send your free brochure, *How to Make a Will That Works*.

- I would consider including NPCA in my estate plans.
- I have already included NPCA in my estate plans.

Name:

Address:

City/State:

Zip Code:

Phone:

Email:

NPCA Address: 777 6th St, NW, Suite 700 Washington, DC 20001



ernment funding and the right to continue ranching. In return, the government can be assured that the land will never be turned into a subdivision, a shopping mall, or any other incompatible development.

“It’s not the traditional way we think of conservation, which typically includes the government establishing parks and refuges,” Jodrey says. “National parks and

on Facebook and Twitter alone—significant strides, considering where the issue stood in Florida’s collective consciousness just several years ago.

“In 2006, ‘Florida Wildlife Corridor’ didn’t return anything in a Google search; now, you might find 50 news articles in Florida papers talking about it,” Ward says. “But we’re not yet to the point

A conservation tool common in the West is starting to take hold in the East: conservation easements.

preserves [remain a vital part of] conservation efforts, but conservation easements are also critical to the Everglades’ health.”

In 2011, a coalition of ranchers and conservationists created the Northern Everglades Alliance, which represents 1 million acres of private land in the Northern Everglades. With help from partners like the National Wildlife Refuge Association and The Nature Conservancy, they’re working to partner with the Interior Department and the U.S. Department of Agriculture to pursue conservation easements and other solutions to protect their land. “These ranchers aren’t just looking for a government handout,” Ward says. “They’re getting together on a monthly basis to talk about an immediate concern: how to keep family lands from breaking apart.”

Getting the public on board is the next step. Once Florida’s residents recognize the value of these interior landscapes—and are willing to fight to protect them—short-sighted developers don’t stand a chance.

This is where Ward comes in. As a conservation photographer, his primary goal is to document these lesser-known landscapes, and the people protecting them, in a visually compelling way. The early results are promising. Among other media hits, the team secured stories on Florida Public Radio and National Public Radio and gained nearly 5,000 followers

where we can walk into a coffee shop in Orlando, ask someone if they know about the Florida Wildlife Corridor, and expect that many people will. So there’s definitely more work to do.”

Just as important as generating public awareness, however, is how the expedition brought together key decisionmakers who have a direct influence on the Everglades’ future. “It’s been really exciting to collaborate with all of these people and agencies that own land in this area,” Ward says. “Many of these groups are already working together and doing really good things, and that’s part of what makes the corridor possible. But the more interagency dialogue we can facilitate, the better, so we’re excited that people from the Florida state cabinet came out and walked with us, as well as heads of state and environmental agencies.”

Dawn Shirreffs, NPCA’s Everglades Restoration program manager, sees the expedition filling an even bigger gap in the public’s understanding of national parks. “I think there’s a growing need to take journeys like this, so we can take our national parks and their boundaries out of the philosophical realm and turn them into something people can actually relate to,” she says. “Getting images of those places that most people don’t see—like the interior of a national park versus a visitor center—really helps people appreciate what we’re protecting.”

The team wrapped up its trek in late April, paddling into Georgia on the Suwannee River alongside National Geographic Explorer Mike Fay, whose work in Africa inspired Ward to pursue this expedition.

“What an appropriate ending,” Ward says. “Navigating through the dark swamp and then huddling around fire in the rain made that night in the Okefenokee feel as wild as the Congo. In that moment, the comparisons between the Everglades and Okefenokee felt especially clear. Our journey had shown that these fantastic wilderness areas are indeed still connected, however fragile that connection might be. This land is the source for all of our water, our food, and our clean air. What’s good for the bear and the panther and the Everglades is what’s ultimately good for us, too.”

— AMY LEINBACH MARQUIS

THE NUMBERS

2 YEARS
to plan the expedition

101 DAYS
to complete the expedition

414 MILES
hiked

353 MILES
kayaked

246 MILES
biked

25 MILES
on horseback

6 GATORS
bumped with kayaks

76 HOURS
of video footage

29,836 PHOTOGRAPHS
taken by Carlton Ward, Jr.

13 FLAT BIKE TIRES

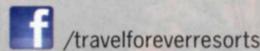
600,000 ACRES
of land that could be protected
by the government’s Greater
Everglades Initiative

Forever Resorts North American Portfolio

Luxury Houseboating Vacations
Unique Lodging | Adventure Tours

Review the entire Forever Resorts
North American Portfolio at

Travel-Forever.com/12npm



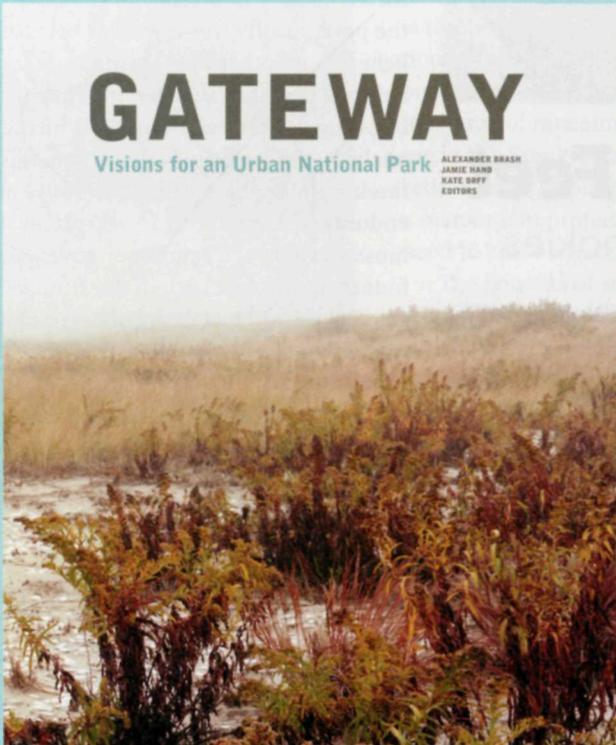
Forever Resorts is an Authorized Concessioner of the National Park Service
and an Equal Opportunity Service Provider.



GATEWAY

Visions for an Urban National Park

ALEXANDER BRASH
JAMIE HAND
KATE ORFF
EDITORS



BETWEEN THE CITY AND THE SEA

Spreading across the coastline of Brooklyn, Queens, Staten Island, and New Jersey, the Gateway National Recreation Area includes wildlife estuaries, bird-nesting areas, salt marshes, historic military forts, beaches, and NYC's first municipal airport, to name just a few of its exceptional features. Due to neglect and misuse, this extraordinary natural and national resource is at risk. *Gateway* presents the collaborative efforts of the Van Alen Institute, the NPCA, and Columbia University GSAPP to investigate and document the diverse ecology of the park and re-envision a more sustainable future for it.

GATEWAY: Visions for an Urban National Park

Alexander Brash, Jamie Hand, Kate Orff, editors

11 x 9.5 in · 224 pp · 349 color ill

\$60.00 · Hardcover · ISBN 978-1-56898-955-6

AVAILABLE AT VAN ALEN BOOKS

AND YOUR FAVORITE LOCAL AND ONLINE BOOKSELLER



Princeton Architectural Press

37 East 7th Street / New York, NY 10003

tel 212 995 9620 / fax 212 995 9454 / www.papress.com



A MAGNIFIED IMAGE OF A "WATER BEAR," or tardigrade, found in moss samples from Europe, very similar to those discovered in Great Smoky Mountains National Park.

attention previously reserved for higher-profile creatures, thanks to the park's All Taxa Biodiversity Inventory (ATBI), an ambitious effort to count and catalog every species of flora and fauna living in the park.

Paul Bartels, a biology professor at Warren Wilson College near Asheville, North Carolina, began leading the project's tardigrade research in 2000 with help from more than 50 students. Before the ATBI, there was only one published record of tardigrades, and only three species had been identified in the park. Now, they can list 81 species—15 of which were previously unknown to science.

But that's not all. In the past decade, Bartels and his team have collected and sorted about 15,000 specimens from the park, mostly from samples of moss, lichens, and other likely tardigrade habitats that they scooped into paper bags and put on a shelf to await further analysis. They also uncovered some fascinating traits: tardigrades' range and endurance. Gravitating to wet places like mosses and beach sand, they have been found 20,000 feet high in the Himalayas and 13,000 feet under water. They can withstand temperature extremes from near absolute zero to 300 degrees Fahrenheit. A 2008 experiment showed they could even survive exposure to the vacuum of outer space.

Because of their rounded bodies and awkward, ambling gait, they are colloquially known as "water bears" or "moss piglets." (Their formal name comes from *tardigrada*, Italian for "slow walker.") Tardigrades acquire much-needed fluids either by piercing the walls of plant cells and smaller organisms with tiny fang-like probes and sucking out the contents with their tubular mouths, or even swal-

The Mosses at Our Feet

Scientists uncover one of the Smokies' tiniest, most bizarre residents.

LIKE ANY NATIONAL PARK, Great Smoky Mountains in North Carolina and Tennessee boasts its own set of iconic animals: black bears trundling through the underbrush, red-tailed hawks soaring above the park's verdant vistas, and white-tailed deer grazing nonchalantly in Cades Cove. Now it's time to add another species to the list: tardigrades, a tiny but remarkable water-loving creature.

Most of the 9 million annual visitors to the Smokies have never heard of tardigrades. Those who have would be hard-pressed to see them without a microscope—the eight-legged, barrel-shaped panarthropods are only about a half-millimeter long—but they are among the park's most extraordinary inhabitants, capable of surviving for decades in a suspended state of almost total dehydration. And they are finally getting some of the

© EYE OF SCIENCE/PHOTO RESEARCHERS, INC.

lowing microscopic animals whole.

But if fluid sources dry up or disappear, tardigrades respond with a tactic straight out of science fiction: They shut down in a process known as cryptobiosis, a sort of suspended animation that allows organisms to wait out inhospitable conditions. Curling up into a tiny ball and filling their cells with trehalose, a protective synthesized sugar, tardigrades can reduce their metabolic activity by about 99.99 percent. When they

Magnified view of a tardigrade egg.



Tardigrades can withstand temperature extremes from near absolute zero to 300 degrees Fahrenheit.

next encounter moisture, they can come back to life in just a few hours; tardigrades can survive in this cryptobiotic state for a few decades.

All of this interest in the Smokies' tardigrade population probably wouldn't exist had it not been for the ATBI, where scientists aren't just counting species but trying to understand how they relate to one another, too.

"The problem that parks and natural areas face all over the world is that we only know a small fraction of the species that occur in each one," says Keith Langdon, who was in charge of inventory and monitoring in the Smokies before his recent retirement. "In places where we have a mandate to protect everything, we need to know what's there."

The benefits of such an inventory seem obvious for endangered species, which, unfortunately, are common in the Smokies: Indiana bats, now threatened by white-nose syndrome; hemlock trees, under attack by sap-sucking woolly adelgids; and the spruce-fir moss spider, whose habitat is vanishing as the park's Fraser firs fall prey to pests. Keeping track of those populations is a vital part of the park's conservation mission. But why go to so much trouble to study a nearly invisible resident like the tardigrade, whose hardiness makes it an unlikely candidate for extinction?

Ernest Bernard, a nematologist

from the University of Tennessee who studies small, insect-like arthropods called springtails, says it's because micro-organisms are probably important in ways we don't yet understand.

"We know a lot about the big, conspicuous species," says Bernard. "We know very little about the small, inconspicuous ones, and yet these species probably have, as a whole, important functions in the maintenance of healthy ecosystems."

To begin to understand those functions, Bartels and his students have developed a key to all the tardigrade species identified so far in the Smokies—now posted online for other researchers. That will allow tracking of the populations over time, as the park's habitats change.

Bartels and his students have essentially donated their work to the inventory project, which operates on a meager budget, but Bartels says the pay-off has been significant in other ways. Thirteen of his students pursued senior projects related to their tardigrade research, and a few have been inspired to do graduate work in the same field. "It's eye-opening for students to realize that we don't know everything and that there's a lot left to be discovered," he says. Even in the mosses at our feet. **NP**

JESSE FOX MAYSHARK is a writer and editor who lives near the Great Smoky Mountains in Knoxville, Tennessee.

17,500 AND COUNTING

The All Taxa Biodiversity Inventory in Great Smoky Mountains National Park, organized by the nonprofit group Discover Life in America, was the first effort of its kind in the United States. When the project started in 1998, scientists knew of about 9,500 species in the park. Now there are 17,500 species on record, including 922 species new to science.



AMERICAN EELS aren't the most charismatic creatures, but they're crucial to the health of the Delaware River, and they play a key role in the lifecycle of mussels.

Dembeck's boyhood on the upper Delaware and his love of the outdoors led him to pursue a career in freshwater ecology and fisheries, with a focus on the American eel (*Anguilla rostrata*). "I swam and rafted on the river in summer," he says. "My parents still do. It was one of the joys of living on the Delaware. And we always saw eels. The water was so clear you'd see their tails and heads sticking out from rocks."

Back then, three decades ago, widespread opposition killed the planned Tocks Island Dam between two current national park units, Upper Delaware Scenic and Recreational River and Delaware Water Gap National Recreation Area to the south. The Delaware still runs free for 330 miles along the entire length of its main stem. It's the longest undammed river on the Atlantic coast and healthier for it. "One of the reasons we have such biodiversity is because of the connectivity to the ocean," says Don Hamilton, natural resource specialist at Upper Delaware Scenic and Recreational River. "American eels are not the most charismatic of creatures, but they're probably more important here than the warm and fuzzy species that people generally think about."

American eels are a host fish for eastern elliptio freshwater mussels, which make up the greatest animal biomass in the river and function rather like the river's kidneys—filtering the water and maintaining its quality and clarity. Some 15 million Americans get their drinking water from the Delaware River Basin, many from the river itself. "You can contrast the Delaware with the Susquehanna, which has many dams on it," says Hamilton. "With the advent of dams, the Susquehanna hasn't had American eels in the upper reaches of that system, nor has it had reproducing populations of the eastern elliptio mussel." A recent experimental

Slip Sliding Away?

Hydraulic fracturing could endanger the American eel and harm the longest undammed river on the Eastern Seaboard.

A S A YOUNG BOY LIVING NEAR PORT JERVIS, NEW YORK, Joseph Dembeck often fished for eels at dusk, by the light of a lantern. This was long before he became a marine biologist and learned all about their status as a keystone species, integral to maintaining the health of the Delaware River. Small ones or "shoe-strings," he tossed back. But bigger ones, fat females, about 18 to 24 inches long and probably 15 to 20 years old, he'd keep. "We'd skin them, cut them into four-inch sections, put some Lawry's spice on them, and grill them and eat them like corn on the cob," he says.

The jury is out on fracking, but the construction of roads and the clearing of seven-acre sites for drilling pads pose an immediate threat to Delaware River habitat.

stocking of American eels in the upper reaches of the Susquehanna watershed by the U.S. Geological Survey aims to change that.

“I call this place the Jackson Hole of the East Coast,” says Sean McGuinness, superintendent of the Upper Delaware Scenic and Recreational River, stressing the river’s clean waters and the fact that 80 percent of the area remains forested. But a new threat looms: Hydraulic fracturing (or “fracking”) would tap natural gas in the sprawling Marcellus Shale region but could compromise the ecological balance of the Delaware River by seriously affecting eel habitat.

“The jury is out on fracking and the poisons they’re going to put 6,000 feet down,” says McGuinness, pointing to serious concerns about potential contamination of the aquifer. “But right now, the immediate threat is ground disturbance, the actual drilling operations, and the clearing of seven-acre sites to put in the drilling pads. The entire process, including road building, will cause erosion and siltation into the streams and creeks that eventually end up in the Delaware River.”

That scenario troubles Dembeck, who fears that burying the Delaware’s characteristic stony bottom under influxes of silt will alter the ecosystem

and make it less complex. “The great rocky habitat and its interstitial spaces make for a phenomenal bug hatch,” he says, “so you get tons of crayfish and tons of macro invertebrates that juvenile eels feed on.” In addition, he notes, the rocky bottom provides convenient hiding places to shelter eels from striped bass and other prey.

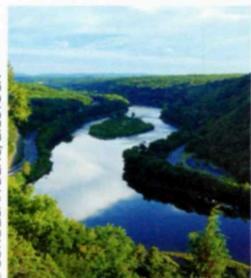
Such changes in habitat could mean fewer American eels, a species already in decline for unknown reasons. And that, in turn, could send Delaware River mussel populations plummeting because of the unique role that eels play in the life cycle of these river-cleansing bivalves. Think of eels as buses for the larval or glochidia stage of the mussels. Released from the gills of an adult mussel into the water no bigger than grains of sand, the glochidia require a host for the several weeks it takes them to metamorphose into tiny mussels able to live on their own. “You want to spread out your progeny,” says Dembeck, who recently retired as fisheries management supervisor for the Maine Department of Inland Fisheries and Wildlife. “And by hitching a ride on an eel, they can do that.”

Just as intriguing is how the mussel accomplishes this. It essentially fishes for its ride. “An adult mussel has an appendage that can look like anything

from a worm to a little fish,” says Dembeck. “That’s what entices these host species. They hit that and bite it, and that’s when the mussel spews out the fertilized eggs. That’s how their progeny get onto the eel.”

At least that’s how things work now, with Delaware River eels and mussels and macro invertebrates thriving in the clean gravel, cobblestones, and boulders at the bottom of the Delaware River. With fracking, there’s no guarantee these key biological processes will continue. With siltation from shale-gas extraction operations raising new concerns, the Park Service can take some comfort in a longstanding program run jointly with the Delaware River Basin Commission, which is helping to define existing water quality and habitat. Maintaining these conditions, and the biodiversity they support, will be a challenge in the face of large-scale changes in land use. But new technology should enable the Park Service to better monitor changes to the river, keeping a finger on its pulse for the sake of every species flowing through its waters. **NP**

JOHN GROSSMANN is a writer living in Mountain Lakes, New Jersey. In 1980, he wrote about the demise of the Tocks Island Dam for *New Jersey Monthly*.



© SONGJIAN DENG/BIGSTOCK

STRANGE SWIMMERS

American eels spawn in the Sargasso Sea and ride the Atlantic currents coastward in their willow leaf-like larval stage. Entering North American river systems as far north as the St. Lawrence, most live their adult lives segregated by sex—females typically continuing much farther upriver than males, in order to grow larger and fatter to increase their ability to reproduce. Spot an eel in or near the Delaware Water Gap, some 200 miles from the river’s mouth, and there’s a slight chance the fish will be male. But 60 or 70 miles upstream, within the Upper Delaware Scenic and Recreational River, every eel you spot is sure to be a female.

SMOKE RISES from surface oil being burned by cleanup crews in the Gulf of Mexico on June 13, 2010.

THE AFTERMATH

Revisiting Gulf Islands National Seashore two years after the biggest offshore oil disaster ever.

Dennis Gerfen moved from California to Pensacola, Florida, 11 years ago. The retired Navy electronics technician walks the almost snow-white sand beaches of nearby Perdido Key two or three times a week. But he stopped in April 2010, when the Deepwater Horizon oil rig began spewing oil into the Gulf of Mexico—oil that would eventually reach Perdido and the 106 miles of Mississippi and Florida beaches in the Gulf Islands National Seashore.



"If you look at the volume of oil expelled from that well, a lot of it still remains unaccounted for."

— Rick Clark, National Park Service

FROM APRIL TO JULY OF 2010, THE DEEPWATER HORIZON OIL WELL, OPERATED BY BP, SPEWED MORE THAN 170 MILLION GALLONS OF OIL INTO

GULF WATERS. The disaster played out just 70 miles south of some Gulf Islands beaches, and no sector of the park would be spared by the oil's eventual spread.

Cleanup in the Gulf has proved to be a massive endeavor that forced the National Park Service to make some unprecedented decisions about just how far it would go to remove oil from the seashore. Today, as BP and the federal government work to settle spill lawsuits and set the retribution levels that will shape the future for Gulf Islands and the broader coast, the agency is focused on what's next.

As unpleasant as the scene may have been to Gerfen, it was nothing compared with what some expected. Many feared a repeat of the *Exxon Valdez* spill that coated whole beaches in black. "I think everybody had that image in mind," says Rick Clark, chief of science and resource management at Gulf Islands National Seashore, headquartered in Gulf Breeze, Florida. "That was our worst fear."

Instead, at Gulf Islands there were patties of oil (some the size of dinner plates), the occasional larger pool, and ropes of oil that coated high-tide lines, but they were slow in coming. The Park Service expected the oil to arrive quickly, as did the tourists who stopped coming to most Gulf beaches well before the oil arrived. "We had no clue what was coming," says Nina Kelson, deputy superintendent at Gulf Islands.

Nobody did. So the Gulf Islands staff talked preparations with those in other areas such as Everglades National Park at the southern tip of Florida and Canaveral National Seashore up the state's east coast. Early on it seemed plausible that currents would carry the oil in that direction, though ultimately those areas were spared.

At Gulf Islands, the Park Service conducted photo surveys at points on the beaches to create a record of conditions before the spill, but for the most part, it was a tense waiting game. The wellhead's location a mile deep and its distance from shore combined with fickle winds and currents to slow the oil's movement toward land, and the oil was much patchier than the blanket of *Valdez* oil in Alaska's relatively confined Prince William Sound. Cleanup

crews used dispersants in an effort to break up the massive quantities of oil on the seafloor and on the surface, which, by most accounts, dramatically reduced the amount of oil that would reach shore—although many experts wondered if the use of those dispersants merely masked the problem or exacerbated it by pouring more chemicals into the Gulf.

IN JUNE OF 2010 THE OIL STARTED MAKING LANDFALL THROUGHOUT GULF ISLANDS. Some made it through inlets to the marshier backsides of the various islands, but most showed up on the beaches.

That left the Park Service with some difficult decisions. The Gulf Islands beaches are havens for both humans and wildlife, so crowds of hundreds of

CRUDE OIL from the Deepwater Horizon oil spill (opposite) washing ashore, June 2010. Rick Clark, chief of science and resource management (below) at Gulf Islands National Seashore, says that although clean-up crews are still at work and tar balls can still be found on the park's shore, the damage was not nearly as bad as initially predicted.



© JEFF AND MEGGAN HALLER/KEYHOLE PHOTO



© JEFF AND MEGGAN HALLER/KEYHOLE PHOTO



© BEN TWIGLEY/PENSACOLA NEWS JOURNAL/AP

cleanup workers would be a poor fit, but so would the oil. As the patties and puddles of goo accumulated, park officials saw no choice but to authorize cleanup crews that would be supervised by special Resource Advisors, or READs.

As part of the response system, employees from the Park Service and other federal agencies came from around the country to act as READs. A biologist from Hawaii might join a park ranger from Texas and a Kentucky forestry technician to patrol a Mississippi beach to make sure that cleanup workers were aware of treatment recommendations and followed protocol, steering clear of areas of special concern such as sensitive vegetation or shorebird nesting sites.

There was too much oil to clean up by hand, so the next step was to bring in

mechanized sifters dragged behind tractors that could collect the oil. In Florida, the Gulf Islands beaches are accessible by road, but in Mississippi, getting people and equipment where they needed to be was substantially more complex.

Horn, Petit Bois (pronounced "petty boy"), East Ship, and West Ship Islands form the bulk of Mississippi's true southern border on the Gulf. All four, as well as part of Cat Island, are part of Gulf Islands National Seashore, but at more than 10 miles offshore, they're difficult to reach or even see from the mainland. These islands were as heavily oiled as any region of the Gulf, but their remote location meant they got less national attention than some of the more visible beaches.

A ferry runs to West Ship during warmer months, and the site has a Civil



© KAREN MINOT

War-era fort as well as bathrooms and a snack bar. But Horn and Petit Bois are both congressionally designated wilderness areas, which means they must be managed to “leave them unimpaired for future use and enjoyment as wilderness.” As a result, standing on Horn’s 14-mile undulating beach line, a visitor can’t see any sign of human construction, and quite often not so much as a footprint.

The Wilderness Act of 1964 specifically forbids any motor vehicles—such as big tractors pulling sand sifters—but by the fall of 2010, at Horn there were barges beached at one end of the island, dozens of utility vehicles and tractor-sifter rigs, and hundreds of workers. This was all sanctioned based on a detailed analysis of the Park Service management policies.

Ranger Ben Moore has lived on Horn most of the time since 1992, except for the few years it took the Park Service to build a small ranger apartment and office building to replace the one that Hurricane Katrina swept away. Though an ardent advocate of the

wilderness concept, he supported the decision of Park Service leaders to take drastic steps to clean the oil.

“We [had] to pay that consequence to get back to where we need to be,” Moore told me during an interview back in 2010. “Not everybody will understand what a big step it was for the Park Service to allow mechanized equipment on congressionally designated wilderness islands. But that tells you more than anything how big a disaster this was.”

By that time, crews had already made major progress. Where the sifters had run, there were only tiny specks of tar balls left behind. Workers came through to pick these up using wire baskets on poles, while their counterparts followed similar procedures at the Florida Gulf Islands beaches.

Despite the oil, the Park Service never closed any beaches other than to keep visitors away from active cleanup crews, though rangers did temporarily discourage swimming in accordance with state and federal precautions. Even so, negative media reports kept most people away.

On the 2010 July 4 weekend, a time when about 500 boats would typically make the run to Horn, Moore counted just 13. “It was eerily quiet,” he says. Aerial photos of Pensacola beaches during that time show a similarly striking emptiness.

During the fall of 2010 and early winter 2011, Park Service leaders had to make another trade-off. Though plenty of oil remained, they opted to suspend cleanup operations throughout Gulf Islands during the critical shorebird nesting season, from March to August.

Bird impacts remain a key concern at Gulf Islands. Hundreds if not thousands of least terns and black skimmers abandoned their colonial nesting grounds on the park’s beaches, most likely due to the disturbance from cleanup work. It’s not clear how many shorebirds ended up nesting in different areas.

Most of the dead or ailing birds that workers found on the Mississippi islands were migrating northern gannets, beautiful white-and-black seabirds with a wingspan that can stretch nearly six feet. Workers also found dead dolphins and other animals, but those findings aren’t unusual, so it’s difficult to say how and whether they were tied to the oil or dispersants; research to answer that question is ongoing.

Four different sea turtle species also nest on both the Florida and Mississippi sides of Gulf Islands. The adults don’t feed when coming onto shore to lay their eggs, but toxins in the oil threatened the hatchlings, so, during the 2010 nesting season, the Park Service worked with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration to move the eggs from some nests to a Florida Atlantic Coast beach outside the oil’s reach.

CLEAN-UP CREWS DIRECTED BY THE U.S. COAST GUARD WILL CONTINUE CLEANING THE BEACHES in cooperation with the Park Service until the job is deemed complete, technically when there is less than 1 percent of oil coverage on most beaches and no visible oil

Local hotels say their reservations aren't quite back to pre-spill levels, but they're getting close.

on the more heavily used recreational beaches. But for now, all work is being done by hand because the oil is scattered in most areas, though some of the Mississippi islands still have much more visible concentrations of tar balls.

Local hotels say their reservations aren't quite back to pre-spill levels, but they're getting close; Kelson says that park visitor numbers are higher than they have been since before the devastating 2004 and 2005 hurricane seasons.

But even some two years out, by the time crews finish cleaning an area, they have to start over again picking up new tar balls. "We'll be involved in cleanup of those areas for as long as it takes," says Clark. Because beaches such as those at East Ship and Horn are more difficult to reach and clean, they have more accumulated oil yet to be picked up.

Some of the oil on beaches is buried in sand, making it difficult to clean with-

out disrupting beach organisms until the sand is re-exposed by wind and waves. This is one of the greatest challenges in the continuing cleanup effort. There are also strong signs that some oil remains submerged offshore, though to date no one has conducted a systematic search inside or outside the national seashore.

"If you look at the volume of oil expelled from that well, a lot of it still remains unaccounted for," says Clark. "There are still many theories as to what happened, where it's circulating, and where it sank, but nobody knows with any degree of certainty."

In April and May of this year a team of divers with the Park Service's Submerged Resources Center in Lakewood, Colorado, will be looking for tar mats. It's not clear whether BP will fund the work, as the Park Service has requested. Other goals include monitoring potential impacts to beach life

that gets less attention, such as ghost and hermit crabs.

The greatest concern is identifying and reducing the spill's long-term effects. Funds for cleanup activities are legally ensured, but how much money will go to monitoring and restoration efforts remains an open legal question.

BP will likely pay a huge retribution for direct environmental damages to the Gulf and communities along the shoreline. The company has promised \$1 billion as an advance on the money it will ultimately owe out of the damage-assessment process (funds to settle personal claims from commercial fishermen and others are handled separately). BP has also agreed to dedicate \$500 million to Gulf research. "There's a long list of potential restoration projects," says Mark Ford, a wetlands ecologist with the Park Service and a representative on the Gulf Coast



© JEFF AND MEGGAN HALLER/KEYHOLE PHOTO



© MICHAEL SPOONEY/BARGER/AP



SCENES LIKE THIS OIL-COVERED BEACH

in Pensacola, Florida, in June 2010 (bottom left) scared people away, but Gulf Islands is seeing visitation figures return to normal. Deborah Polk fishes from Fort Pickens (left) as a great blue heron looks on. Here, the Wright family celebrates a daughter's birthday at the park in March.

© JEFF AND MEGGAN HALLER/KEYHOLE PHOTO



© JEFF AND MEGGAN HALLER/KEYHOLE PHOTO

ALTHOUGH BP HAS ALREADY AGREED to dedicate \$1 billion to restoration work in the Gulf, Mark Ford, a wetland ecologist for the Park Service, says it will take years to prioritize the projects.

Ecosystem Restoration Task Force, which is working to establish a long-term plan. “We have to sort through what is best and what can be funded,” he says. “We have a ways to go, and when it comes to implementation, that’s going to take years.”

BP also will have to pay fines for the oil spilled. This money could simply go into government coffers, but legislators are working to pass the RESTORE Act, which would guarantee that a substantial portion goes to the Gulf—an effort that NPCA strongly supports, as Gulf Islands, Jean Lafitte National Historical Park and Preserve (Louisiana), and Padre Island National Seashore (Texas) could all benefit.

John Adornato, director of NPCA’s Sun Coast Regional Office, says that as funds come through, one of the most critical concerns will be proper management, because it’s not yet clear whether the Gulf Coast Ecosystem Restoration Task Force will remain in place to oversee efforts for the long term. “Once the lawsuits are resolved and the impact fees identified, then there needs to be a sequential and structured means of ensuring that the best and most appropriate restoration projects move forward.” NPCA is also advocating that new areas of the Gulf

coast be protected from development and oil drilling (see sidebar).

Although the Gulf Coast wasn’t hit as hard as some feared, there is still much to do. To Moore at Horn Island, those who have declared the spill’s damages erased or concluded are a bit short-sighted. “The damages were not as dramatic as expected. The disaster didn’t photograph as well as CNN would have liked,” he says. “It’s a creeping impact. But the oil is definitely going to be with us for a while.”

That said, visitors to Gulf Islands’ most popular beaches aren’t likely to find many signs of the spill unless they’re looking closely. On a recent weekday at Perdido Key, Gerfen is glad to be back to his regular routine, and he didn’t see any tar balls. There is work still to be done, and there are open questions regarding long-term impacts, but among Park Service staff, there is also cautious optimism—and more than a little thankfulness that their *Exxon Valdez*-inspired worst nightmares haven’t played out. **NP**

MARK SCHROPE is a freelance writer living in Florida, where he is finishing a book about the science and environmental impacts of the *Deepwater Horizon* disaster. His work appears in publications such as *Nature* and *The Washington Post*.

BUT WAIT, THERE'S MORE

State of Mississippi moving to drill for natural gas below Gulf Islands

When Congress established Gulf Islands National Seashore in 1971, the state of Mississippi agreed to hand over several plots of land with the condition that the mineral rights remain with the state—meaning Mississippi officials could allow a company to drill for oil and gas that lay below the park’s surface, a practice that unfolds at Padre Island National Seashore, for example. But for 40 years, the land at Gulf Islands remained untouched. Last December, as his term was coming to an end, Governor Haley Barbour proposed regulations that would allow the state to lease lands for seismic testing and drilling for natural gas. Horn Island and Petit Bois Island are both designated wilderness areas, which means drilling equipment is forbidden, but directional drilling initiated from an adjacent site is perfectly legal. If oil or gas extraction moves forward, rigs as high as 6 stories could be built one mile off the park’s coast, making them visible to most of the 1 million visitors who come to the islands every year (another 4 million visit the Florida side of the park). The park’s superintendent, Dan Brown, is also concerned about potential toxins in the water, light pollution, noise pollution, and air pollution, all of which would have an impact on endangered species like sea turtles, Gulf sturgeon, and piping plovers.

As Mississippi moved ahead in the scoping process, the state’s mineral leasing office failed to notify the park of an imminent public-comment period, inexplicably confusing the Park Service with the Fish and Wildlife Service; the park’s pleas to extend the comment period for that very reason were ignored.

“Our concern is that there is no way the drill rigs could be positioned without being visible from the park,” says Brown. “Visitors on the south side of Horn and Petit Bois Islands have a true wilderness experience—all they can see is open water and the occasional passing ship, and we’d like to retain that experience.

“The state has a real gem off its coast—a national park just like Yellowstone or the Grand Canyon. We want state officials to preserve the qualities and the character that Congress intended when it created this national seashore.”

To get involved, visit healthygulf.org or www.12milesouthcoalition.com. —SK



NPCA Proudly Thanks our 2012 Salute to the Parks Corporate Sponsors

PRESENTING SPONSOR



PARK CHAMPION



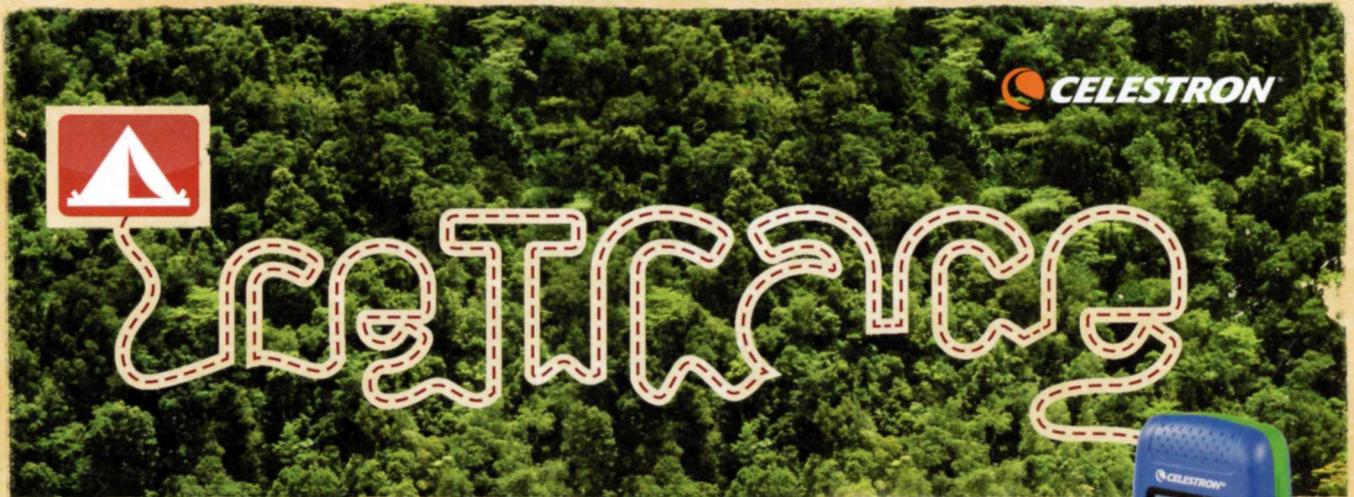
BENEFACTOR



PARTNERS



Booz | Allen | Hamilton
strategy and technology consultants



Keep your bearings anywhere, from the untamed wilderness to the urban jungle, with a GPS device from Celestron. reTrace GPS is a rugged, dependable, accurate navigation tool that is the perfect safeguard for the whole family. Save your favorite locations, record your trail data, and then view, share and plan your next adventure!

YOUR ADVENTURE STARTS HERE www.CELESTRON.com



Learn more about reTrace Deluxe & reTrace Lite by scanning the QR code with your smart phone or visit www.celestron.com/retrace



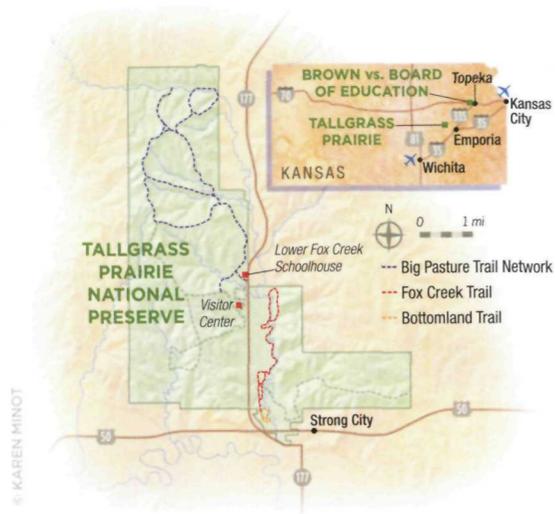


Prairie Solitaire

In the middle of America, Tallgrass Prairie National Preserve offers an intimate, grounding experience.

I'M HOOFING IT BACK TO MY CAR after an evening spent stargazing in Tallgrass Prairie National Preserve in Kansas, when the ground starts to tremble under my feet. I've stirred the bison from their slumber and done it in just about the most dangerous way possible—by unwittingly getting too close. My attempts to spot the herd a safe distance from its bedding area had clearly failed. If I survive this, I think, I'll need to buy a better flashlight.

Text and Photos by Morgan Heim



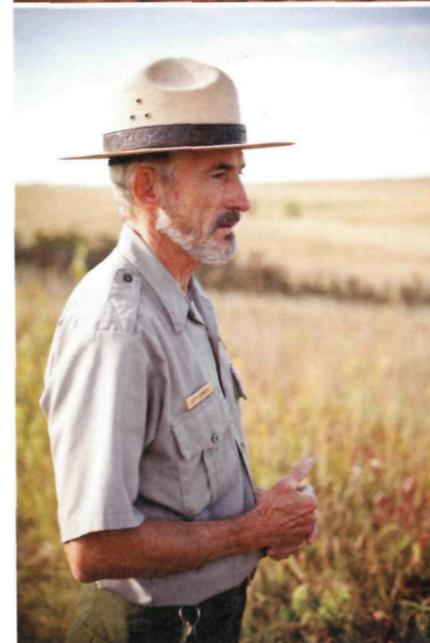
© KAREN MINOT

Snorts and thundering hooves echo through the darkness, and all I can do is wait for the hulking figure of a frightened, sleep-deprived bison to careen into my circle of light. But as I listen, I realize the bison are running away from me. My heart beats again. I choose a wide path around the trail, making sure to leave the bison plenty of room.

These bison are lucky—inside the preserve, they can stretch their legs—but most of their predecessors were either killed off or squeezed out by development. Of the 170 million acres of land that once constituted their grassland habitat, only 4 percent remains. In 2009, the National Park Service and The Nature Conservancy introduced 13 plains bison to the preserve; two years and three babies later, the herd is thriving on one of the largest and best protected landscapes of its kind. Here, there's still plenty of grass tall enough to tickle the bellies of bison.

The morning after my close encounter with the herd, I'm walking up the Big Pasture Trail, a 13-mile loop of old ranch roads now used primarily by fire crews and researchers. Not many visitors walk the trails here. Of the roughly 22,000 people that come every year, most opt for a short bus tour to an overlook, or maybe a trip to the Spring Hill Farm and Stock Ranch. But with more than 40 miles of trails, most of which were opened to the public in the last two years, this preserve was made for walking. Here, visitors don't need to worry about dodging cyclists or horseback riders or getting stuck in a traffic jam.

A SMALL HERD OF BISON, reintroduced to the preserve in 2009, is a common sighting from the park's bus tour. But park guide Jeff Rundell (below) encourages visitors to get out of their vehicles and explore the park by foot whenever possible.



TRAVEL ESSENTIALS

The best time to visit Tallgrass Prairie National Preserve is late May through early June, when the prairie is a sea of green grass and wildflowers. The second best time is mid-October, when the summer grasses turn red for the prairie's version of fall colors. Hikes in the morning and evening will afford you beautiful light and a little escape from summer heat. Be sure to check the website for trail conditions and to reserve space on the tour bus, which takes you past the bison herd and to an overlook with prime prairie viewing. Bus tours are offered daily at 11 a.m. from the last Saturday in April through the last Sunday in October, with more available as staffing allows. The preserve is also testing a newly minted cell-phone tour. Numbered markers along trails and in the ranch headquarters area correspond to a dial-in code with recordings of factoids and prairie history. Fliers for the tour are available in the visitor center.

Getting there is easy. From Kansas City International Airport, it's a 72-mile trip west to Topeka, Kansas, and another 80 miles southwest to Tallgrass Prairie National Preserve. From Wichita International Airport, an 85-mile drive northeast will take you to the preserve.

Within spitting distance of the preserve is the budget-friendly Prairie Fire Inn and Spa, where wood paneling and Norman Rockwell posters take visitors back in time. Rooms are clean and sparse; bathrooms are stocked with organic soaps in biodegradable packaging. The inn has free wi-fi and decent cell-phone service, which can otherwise be spotty in the area.

The Millstream Resort, located along the picturesque Cottonwood River in Cottonwood Falls, is another option for clean, down-home motel accommodations. This quaint town, about six miles south of the preserve, is also home to the historic Grand Central Hotel, which is a fine place to grab a meal. Dinner here is a bit of a splurge, but lunch includes reasonably priced sandwiches, salads, and quesadillas. Reservations are recommended. Another local favorite is the Emma Chase Café, known for its homemade pies, hearty cooking, and Friday night music festivals.

Driving east to Emporia, you can choose from an array of standard chain motels and restaurants; Topeka provides similar lodging options. The Ramada Convention Center downtown has reasonable rates that include a full breakfast, and it is located close to Brown v. Board of Education National Historic Site (see "Side Trip," page 42).

Prairie Solitaire

Exploring this place is all about putting one foot in front of the other—a method that park guide Jeff Rundell understands well. “I just love to run out on the prairie,” he says. “I love the freedom, the idea of getting out there and seeing nothing but grass and open space.”

Beyond the old farmhouse, bluestem grass, wild coneflowers, and 500 other plant species stretch for as far as the eye can see. I imagine stepping into a time when pioneers traversed this oceanic landmass on their way to the promise of the West. Suddenly, the faint rumbling of engines and beeping trucks in the distance whisk me back. Their presence seems to signal an awakening for the preserve: Construction is under way on a new visitor center and restrooms.

I’ve come to the prairie at the tail end of summer, and the land is alive with the monarch butterfly migration. As I move farther into the preserve, cicadas quickly drown out any sounds of construction. I find myself incredulous that an animal so small can bombard my ears with a sound so large (male cicadas produce a buzz upwards of 100 decibels—the insect version of a packed concert hall). Birds sing, although I can’t always see them, and somewhere in the grasses to my right, a frog calls for a mate. This is a place where the rarity of visitors leaves nature to shout out loud.

After stargazing, bison stampedes, and early mornings spent watching the sun rise over the Flint Hills, I’ve arrived at my last day at the preserve. By now I’ve more than earned my



LONG, SLOW WALKS THROUGH THE PRESERVE reveal a stunning mix of flora and fauna, from box turtles sunning themselves along pathways, to wild goldstrum that light up the prairie, and monarch butterflies that pass through in late summer on their way to Mexico.



SIDE TRIP

BROWN V. BOARD OF EDUCATION NATIONAL HISTORIC SITE

In Topeka, about a 90-minute drive northeast of Tallgrass Prairie National Preserve, our country reached a critical turning point at what is now Brown v. Board of Education National Historic Site. Here, black children were finally allowed to attend school with white children in 1954. The brick-faced Monroe Elementary School is the site’s lone building. Polished halls invite visitors into an immersive experience of Civil Rights history, including a tour de force of multimedia displays that would put much larger museums to shame.

Hanging from the school’s gymnasium ceiling, a three-screened synchronized movie called “Race and the American Creed” introduces the story of equal rights in America. Down the hall in an old classroom,

touchscreens allow visitors to test their Brown v. Board of Education knowledge. Little did I know that the case consisted of five lawsuits argued simultaneously before the U.S. Supreme Court.

For me, the most goosebump-inducing, time-travel-worthy exhibit here was the “Hall of Courage,” a tunnel of four giant video screens separating one half of a classroom from another. Here visitors walk in a student’s shoes through a hallway of cacophonous news footage depicting angry mobs. I literally held my breath as I pushed through to the other side.

Brown v. Board of Education Historic Site is good to visit anytime, though late summer may provide a quieter experience.

prairie legs, but there's one last trail I have to hike. I need to time it just right: that part of the day when the sun bathes the land in soft golden light. For my last visit, I want to see the prairie in full glory.

So early in the afternoon, I sit idling at a Starbucks drive-thru in nearby Emporia to fuel up and kill time. As I wait, the girl at the window strikes up a conversation. "What are you up to today?" she asks. I tell her that I'm going to the preserve.

"Oh, I've been meaning to go there," she says. "But no one will go with me."

I suggest she go by herself, hoping she'll be encouraged by the fact that I, too, am a young woman traveling solo.

"Nah," she says. "There are chiggers out there. My biology professor showed us pictures of what the bites look like."

It seems the very nature of nature keeps even the locals at bay.

I return to the preserve and pull into an empty parking lot. My 6-mile hike takes me along Fox Creek, another new trail in a very different type of tallgrass prairie known as the "bottomlands."

Here, dry hills give way to wetter lowlands and the grasses grow their tallest. I reach my hands high in the setting sun, and the tops of the plants evade my fingertips. Cottonwoods line a ridge, and a creek winds through woods farther below. In one field, hidden by a wall of sunflowers, I watch wildlife forage in dimming light: a flock of wild turkeys and every member of a white-tailed deer family—a buck, a doe, and three fawns. Hawks sweep through the branches and up to a butte on the other side of the ravine.

I've spent a lot of time in national parks since I was a child, but this moment marked the first time in a while that I felt a park was mine. What has in many places become an overcrowded nature experience goes back to its roots at the Tallgrass Prairie National Preserve. I am literally the only person for miles—and I didn't even have to go very far to get there. **NP**

MORGAN HEIM is a freelance writer and photojournalist in Boulder, Colorado.



TRAVEL WITH NPCA

TALLGRASS PRAIRIE NATIONAL PRESERVE

Fall 2013

In 1996, Congress added Tallgrass Prairie National Preserve to the park system, thanks to decades of advocacy by NPCA and its allies. This fall, reap the benefits of their hard work with an NPCA-led excursion that begins in Wichita, Kansas, where visitors can immerse themselves in prairie life past and present. After a tour of the Great Plains Nature Center, you'll head north to the historic town of Council Grove, which boasts 24 historic sites, a revitalized river walk, and the Victorian-style Cottage House Hotel. Next, you'll wander through high grasses and late-season wildflowers in Tallgrass Prairie National Preserve, and then explore the Santa Fe Trail, once a key route for covered-wagon travelers **INTERESTED?** Contact NPCA at 800.628.7275, travel@npca.org; visit www.npcaparkscapes.org; or circle NPCA ParkScapes on the reader service card, page 21.





Old Faithful Inn
Yellowstone National Park



SLEEP WITH BEARS

AND BISON, WOLVES, DEER AND EVEN GEYSERS.

As the in-park lodging concessioner at legendary places like Yellowstone, Zion, Crater Lake and Grand Canyon South Rim, Xanterra helps you fully experience some of the most beautiful places on earth. We're not just close, we're there. Visit xanterra.com to plan and book your unforgettable adventure.

Xanterra
LEGENDARY HOSPITALITY
with a softer footprint®

A TOY SHOVEL and discarded plastic tabs from beverage containers comprise this image used to advertise a coastal clean-up event in California in 2010.



Found Objects

Two artists turn trash into treasures at Point Reyes National Seashore.

By Amy Leinbach Marquis

It's spring of 1996 in Point Reyes National Seashore, California. Richard Lang and his 14-year-old son, Eli, are removing invasive plants for a volunteer project when they take a lunch break at Kehoe Beach—a spot they love for its spectacular wildflowers. But that

day, something else dominates the landscape: plastic. A lot of plastic. In all shapes, sizes, and colors: weathered shards, bottles and caps, ropes and netting, even car bumpers. Washing in with the tide and trashing the beach. Richard and Eli are disgusted and can't shake the image from their minds.

**FOR MORE THAN A
DECADE,** Judith and
Richard Lang, shown
here in their San
Francisco studio, have
been creating art from
trash collected at Point
Reyes National Seashore,
opposite. Far right, an
agricultural tie commonly
used on grape vines in
Sonoma and Napa Valley.





© ANDRIA LO/ORANGE PHOTOGRAPHY (2)

They returned the following week on a mission and ended up hauling out seven huge garbage bags full of trash. “We were going to throw them away at the dump, but then it occurred to us that ‘away’ was some mythical land that doesn’t exist,” Richard says. Instead, they started sorting through the plastic and separating items by color. And that’s when the problem began to shift: This wasn’t trash—it was art material. And that was a handy thing, as Richard happened to be a professional sculptor.

The very same spring, an artist named Judith Selby was picnicking regularly at a park on Richardson’s Bay near San Francisco. While she was eating, she’d notice brightly colored bits of plastic along the shore. “I’m always looking for art materials, especially free art materials, so I started gathering them and making small sculptural pieces,” she says.

But Judith and Richard wouldn’t meet for three more years, when she walked into Richard’s fine-art printing store in San Francisco to get an estimate for a project she was working on. They were drawn to each other immediately, and it took just one date—which included a stroll along Point Reyes’ seashore—to make the art connection.

“We were walking on the beach, and Judith picked up a piece of plastic, and I asked, ‘Are you going to keep that?’” Richard says.

“And I said, ‘Wait a second, you just picked up a piece of plastic too—are you going to keep that?’” Judith adds.

“What are the chances of finding somebody else who likes to pick up plastic and make artwork out of it? It was just too extraordinary.”

They began collaborating on art projects right away, and four years later, they got married. In 2001 the park’s main visitor center and another local gallery housed their first exhibit: “One Beach, One Year,” a year’s worth of plastic found on Point Reyes’ Kehoe Beach. The couple did more than simply hang colorful images on walls; they led the public on guided trips to the beach to gather even more plastic, then provided a “creation station” outside the exhibit where people

“Our art is not conflict-free, but we want to make it beautiful so people participate.”

could make something of their shoreline debris. It was the beginning of a beautiful trend. Long after the exhibit came down (and their artwork moved on to places as esteemed as San Francisco Museum of Modern Art’s Café Museo and Artist’s Gallery Windows), Judith and Richard continued to run into beachgoers collecting plastic in Point Reyes.



IN CHOOSING WHICH ITEMS to pick up at Keyhoe Beach, the Langs are attracted to sand-worn pieces that have demonstrated a long life at sea. “We must choose,” Judith says, “because the amount of trash is endless.” These items just happened to compliment bowls and plates from the couples’ own cupboards.

“It really had a direct impact on people,” says Loretta Farley, an interpretive ranger at the national seashore, “much more so than a pile of trash or signs saying ‘Don’t Litter.’” It was also a wake-up call, she adds, for those who weren’t aware of the effort that goes into keeping park landscapes pristine. “When you visit the park and you’re immersed in this natural environment, you don’t necessarily realize the human labor that’s involved. It’s the behind-the-scenes story of national parks—people like Judith and Richard who are out there cleaning beaches and clearing trails. They’re not just looking to a government agency to solve a problem; they’ve taken ownership, and they’re stepping up to work with the Park Service and create a solution.”

But should they really be turning such an ugly problem into something so appealing?

“It’s not conflict-free in our minds,” Judith says. “People chide us all the time for making it look so beautiful.

But we want to make it beautiful so people participate.”

“We

don’t want to talk to the ‘arrived and the anointed,’” Richard adds. “We want to talk to people who don’t understand it, who are not environmentally aware.”

And sure enough, the Langs are engaging a broad scope of people all over the Bay area. “There’s this wonderful dance that happens when people look at our

displays,” Judith says. “They’ll be intrigued and will move forward and look at the artwork, and sometimes they’ll recoil and say, ‘Eww, what is that?’ and then they’ll move forward again. Often they’ll say, ‘Wow, I used to have one of those.’” And that sparks the personal connection—and ultimately, the personal sense of responsibility—that the Langs hope to trigger.

“Plastic is an amazing, wonderful material. My own father had a plastic aorta replacement in his heart that extended his life for some time,” Judith says. “If we’re against anything, it’s the indiscriminate ‘use it and toss it’ plastic—the plastic bags, the single-use water bottles, the plastic spoons at the ice cream shop—these things that we use for a split second, then toss away.

“Point Reyes National Seashore was once slated for development; there could have been mega-mansions all along the coast. But there were people who said, ‘No, we have to make this a national park.’ Richard and I are grateful to them, and we feel a responsibility to honor their legacy by keeping the place tidy, by doing our little bit of planetary housekeeping. We’re just two people cleaning 1,000 yards of one beach. If everyone would take on one little part of a national park—whether it’s restoring habitat or cleaning the watershed or whatever moves them—we would all be better for it.”

The Langs’ next exhibit premieres this July at the San Francisco Public Library’s main branch and Switzerland’s Design Museum in Zürich. For more about their work, visit www.beachplastic.com. **NP**

AMY LEINBACH MARQUIS is associate editor of *National Parks Magazine*.



ON THE WEB

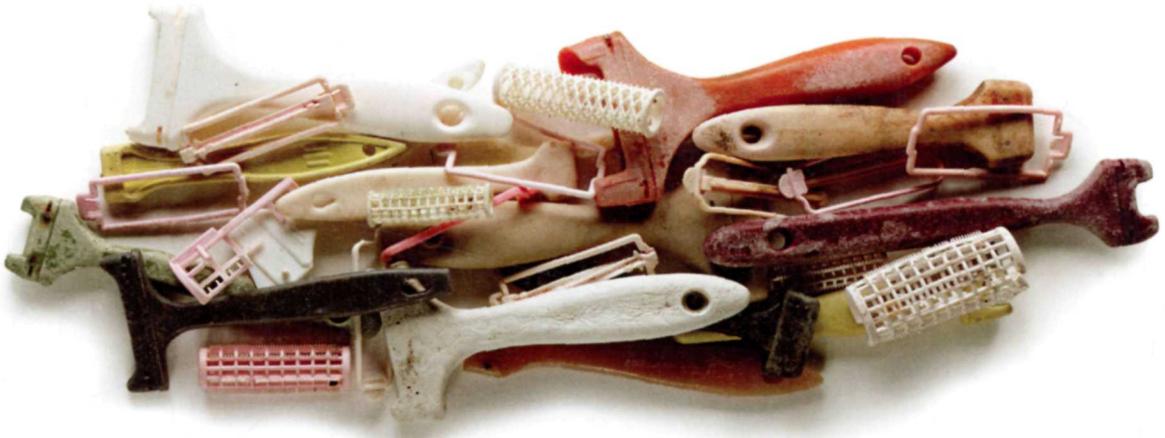
Visit www.npca.org/magazine to watch a short video that profiles the Langs and reveals their creative process.



"THE DETAIL ON TINY PLASTIC TOYS is so precise relative to the other flotsam at the surf line, so they come into focus easily," Judith says. "More often than not, they are broken or severely sea-worn. How can you not think of the wounds of soldiers when looking at these elves of war?"



"DISPOSABLE LIGHTERS ARE BILLED as a use-it-and-toss-it item," Judith says. "But we know that everything 'disposable' goes somewhere, and once there, it remains for a long, long time."



"Every piece of plastic we find holds at once a kind of wonder and nausea," Judith says. In one sculpture, paintbrush handles take on the form of fish swimming through a sea of plastic; in another, fake plastic plants create a sort of man-made ecosystem of their own.

Limited Mintage Striking...

WORLD'S FIRST \$100 SILVER PROOF



First-year
2012 date

Mirrored proof
background

Larger Franklin
portrait

Liberty Bell, quill pen
& July 4th date

Minted in one Troy ounce
of pure silver bullion

Shown larger than
actual size of 6" x 2½"

New York Mint Announces the Limited Mintage Striking of an Extraordinary Silver Proof—the New United States \$100 Bill Struck in Pure Silver Bullion. Discount Price \$99

ADVANCE STRIKE DISCOUNT

The price for the 2012 One-Ounce Silver Proof will be set at \$129 per proof.

However, if you place your order now, you can acquire this giant silver proof at the special advance strike discount price—only \$99.

NOTE TO COLLECTORS: *If you place your order for the \$100 silver proof within the next 10 days, it will be processed immediately, and the earliest orders will receive the lowest registration numbers.*

ADDITIONAL DISCOUNTS

Substantial additional discounts are available for serious collectors who wish to acquire more than one of these exquisite silver proofs. You can order:

ONE Year 2012 \$100 Silver Proof for just \$99 + s/h

FIVE Year 2012 \$100 Silver Proofs for just \$95 + s/h

TEN Year 2012 \$100 Silver Proofs for just \$89 + s/h

There is a limit of twenty \$100 Silver Proofs per order, and all orders are subject to acceptance by New York Mint.

ONLY 9999 AVAILABLE

New York Mint will strike only 9999 One-Ounce Silver Proofs for the year 2012, so oversubscription is a virtual certainty.

Telephone orders only will be accepted on a strict first-come, first-served basis according to the time and date of the order.

Call Today to Order Your \$100 Silver Proof!

1-888-201-7060

Offer Code: NSP180

Please mention this code when you call.

A major credit card is necessary to secure your reservation, and New York Mint guarantees satisfaction with a money-back policy for a full 30 days.

New York Mint

This extraordinary piece of pure silver bullion has a surface area that exceeds 30 square inches...and it contains one Troy ounce of pure silver bullion!

And now, during a limited strike period, the very first Year 2012 \$100 Silver Proof is available at a special discount price—only \$99!

EXQUISITE DETAIL

The historic First Year 2012 \$100 Silver Proof is an exquisite adaptation of the United States Treasury's \$100

Federal Reserve Note—only the second new \$100 bill design in 70 years. It is a true artistic masterpiece that will always be treasured.

.999 SILVER

Best of all, this stunning Silver Proof is even more beautiful than the original, because it's struck in precious silver bullion!

It is a landmark in proof minting, combining unprecedented weight with extraordinary dimension. The specifications for this colossal medallion proof are unparalleled. Each one:

- Is Individually Struck from Pure .999 Silver Bullion.
- Weighs one Troy ounce.
- Has a Surface Area That Exceeds 30 Square Inches.
- Contains 31.10 Grams (480 Grains) of Pure Silver.
- Is Individually Registered and Comes With a Numbered Certificate of Authenticity.
- Is Fully Encapsulated to Protect Its Mirror-Finish.
- Includes a Deluxe Presentation Case.

Prices and availability subject to change without notice. Past performance is not a predictor of future performance. New York Mint is a private distributor of worldwide government coin issues and is not affiliated with the United States government. Facts and figures were deemed accurate as of January 2012. © 2012 New York Mint

Visit our web site at www.newyorkmint.com



The Distant Rumble of White Thunder

A family's year-long quest to explore America's most endangered parks brings them to Glacier Bay, Alaska.

THE TWO BIG, DARK MOUNDS OF BEAR POOP make no sound. They speak no words. But they communicate a persuasive argument that we should consider camping somewhere else.

The three oval depressions in the beach sand, where the brown bears had lain down to sleep, bolster that argument, as do the paw prints stamped all over the ground. The scat is fresh, the impressions of long claws still

intact in the sand. These bruises bedded down here last night.

Just minutes ago, my seven-year-old daughter, Alex, and I paddled our two-person kayak to the edge of the beach, and our lead guide, Sarah Rennick, walked over to us.

"We're thinking of camping here. There's just one problem," Sarah told me. "It's a bear highway."

I nodded. Although we met just yesterday, I can already see that, in Sarah, we have not only a skilled and sensitive guide but a master of understatement.

Looking up, I scan the steep, treeless slope above this remote wilderness beach near the mouth of Johns Hopkins Inlet, 55 miles up Glacier Bay in Southeast Alaska. I let my gaze roam over cliff bands and boulders, scrubby vegetation, and

gullies that offer a hundred nooks for a thousand-pound predator to hunker down out of sight yet close enough to know we are here.

Our group of 12 people mills around on the wet beach, stretching stiff legs and backs after spending the past few hours shoehorned inside kayaks. Nate circles me like a satellite, my nine-year-old shark boy almost constantly in motion. He chatters excitedly about the scat and prints, pouring out his stream-of-consciousness thoughts on how we could fortify this beachhead and use our pepper spray to fend off an ursine assault. Alex hovers nearby, quietly inspecting this evidence of carnivores 15 or 20 times her size.

The brown bear. *Ursus arctos*. Alaska's version of the grizzly bear. Can grow to more than a thousand pounds. Can sprint across open ground—and virtually all the ground here is open—faster than Lance Armstrong can pedal a bicycle. Brown bears: among the top three concerns my wife Penny and I had about sea kayaking and camping for five days here with the kids, and far more viscerally terrifying than the other two—the notoriously wet, cold weather and even the frigid sea, which could suck the life from an adult in 15 minutes if a kayak capsized.

Sarah lays out our options. We could camp here tonight. Bears are unlikely to approach so many people—statistically true, but what do bears know about statistics? Of course, if they return, we might have to get into the kayaks abruptly and leave, maybe abandoning camping gear, possibly during the night. Everyone, no doubt, can envision worse scenarios. Alternatively, the next prospective campsite is a

“We’re thinking of camping here. There’s just one problem,” Sarah told me. “It’s a bear highway.”

30-minute paddle from here.

It’s mid-afternoon, overcast but not raining, cool but not freezing. Everyone’s warm enough in our multiple layers of clothing. No one’s tired. We reach a speedy consensus to move on, the sense of relief palpable as we shove off.

Back in the kayak, I ask Alex what she thinks of leaving, and she says, “Well, I wasn’t worried about it until I saw those big bear paw prints.” That’s my sensible daughter. Nate, on the other hand, might like to see us deploy our pepper spray on a bear. To him, weapons are like wings on a bird: no point having them unless you let ‘em fly.

It’s the second afternoon of our five-day sea-kayaking trip run by Alaska Mountain Guides. We’ve come to paddle around Glacier Bay’s upper West Arm, probing deep within one of the world’s largest and most pristine wildernesses, a UNESCO World Heritage Site the size of Greece. We’re here to see the original complement of North America’s land and sea creatures and towering mountains buried under snow and ice.

Glacier Bay is the third stop in a series of family wilderness adventures I’m taking with my family in 11 U.S. national parks in a year, a magnificent odyssey of backpacking, sea kayaking, cross-country skiing, canoeing, and rock climbing inspired, ironically, by an impending tragedy: the rapidly escalating impacts of climate change on our parks.

We’ve come here to witness the last

hurrah of the Ice Age. While conventional thinking has it that Earth’s most recent glacial period ended 10,000 years ago, in Glacier Bay you can watch its final act.

Two and a half centuries ago, Glacier Bay did not exist; it lay beneath one solid river of ice 4,000 feet thick, up to 20 miles wide, and 100 miles long, sticking its blue-and-white tongue out into Icy Strait. In 1794, when British Captain George Vancouver sailed HMS *Discovery* through Icy Strait, he wrote in his ship’s log of seeing a “sheet of ice as far as the eye can see.”

Since then, Glacier Bay has seen the fastest glacial retreat on the planet. Today, this fjord extends 65 miles into the mountains. In the lower bay, ice-free for 250 years, a mature temperate rainforest grows almost impenetrably thick, watered by six feet of rain a year. In the upper bay, bare sea cliffs show the scars left by clawing glaciers that drew back within the past century. Just 60 miles from an old-growth forest, the thin soil sprouts only a few hardy shrubs and flowers. Life rises from the Earth’s ravaged skin on the slimmest promise of existence.

The bay is a sort of northern paradise, home to humpback whales, orcas, harbor seals, four species of salmon, sea otters, Steller sea lions, mountain goats, and a multitude of birds from pigeon guillemots and bald eagles to rare horned puffins. Roaring with an explosive sound that the native Tlingit



call “white thunder,” several glaciers frequently discharge massive blocks into the bay, at times choking their inlets with icebergs.

But all is not well in paradise.

Like an ice-cream cone in the warm sun, the cold regions of the world are melting fast—faster even than scientists or computer models have anticipated. Over the past 60 years, Alaska’s average temperature has increased 3 degrees Fahrenheit, triple the worldwide rate. In the 1970s, 12 glaciers stretched to tide-water in Glacier Bay; today, five do. Some of those may suffer the fate of the Muir Glacier, which 30 years ago was like the Johns Hopkins: spewing bergs into the sea, attracting seals to birth pups on those bergs, safe from brown bears and orcas. Raptors fed on the fish attracted to the nutrient-rich waters churned up by the ice. In 1993, the Muir crawled up onto land like a stranded sea creature taking its last breaths. Today it’s a “wasting

the annual mean temperature is right about the freezing mark, a very small change in temperature one way or the other makes a big difference on the landscape.”

I have been reporting about the impacts of global warming on the natural world since April 2007, when, on assignment for *Backpacker* magazine, I skied high into the Northern Rockies of Montana’s Glacier National Park with scientist Dan Fagre. A research ecologist who runs the Glacier Field Station of the USGS Rocky Mountain Science Center, Fagre had sounded the warning that the 7,000-year-old glaciers in one of America’s most revered parks would be gone within a human generation.

As I researched the impacts elsewhere, the news was deeply troubling.

Yosemite’s famous waterfalls will peter out earlier in the year as snowfall diminishes. Rising seas will inundate at least one-third of Olympic National Park’s 73-mile-long wilderness coastline, the longest in the contiguous

glades, one of Earth’s greatest sanctuaries of biological diversity, appears fated to sink beneath the waves. We’re in the midst of a holocaust that is expected to claim up to 40 percent of plant and animal species worldwide by 2100, including 21 percent of mammals, 37 percent of freshwater fish, and 70 percent of plants.

These events are bellwethers of the tectonic shifts tearing through the natural world, wrought by forces we have set in motion but which now possess a momentum of their own.

We’ve designated and protected national parks because we need these places. They inspire us. They bring out our best as individuals and represent our highest aspirations as a civilization. But now we have weirdly recalibrated nature. Less than 150 years after the founding of Yellowstone, which introduced the concept of national parks to the world, we are undermining one of our country’s greatest achievements.

I wonder what my kids will not experience because of the slow, warm flood inundating nature.

I embarked on this year of adventures in the parks I’ve mentioned and several others partly because I wanted my kids to learn something about climate change, but also because I wanted them to discover what I’ve found: the joy of moving under your own power, at human velocity, through a place crowded not with people, artificial noise, machines, or flashing lights but with the abundance of nature. Maybe they’ll even communicate to their generation the moral imperative of not ignoring the fact that we’re broiling our planet under the hot lamp of selfish indifference.

But mostly, we would spend this year outdoors for our kids—for joy, curiosity, and wonder. Because I want my kids to see these things before they’re gone.

**I want my kids to discover what I’ve found:
the joy of moving under your own power, at
human velocity, through a place crowded not
with people, artificial noise, machines, or flash-
ing lights but with the abundance of nature.**

glacier,” melting in place. When the bergs left Muir Inlet, the seals followed, as did the orcas, many of the birds, and the kayakers.

Brendan Moynahan, who oversees Park Service research in Southeast Alaska, told me, “There will be big, unexpected changes. For a place like Southeast Alaska, where

United States. Joshua Tree National Park, where I’ve rock climbed the fingertip-shredding granite towers, will lose its namesake flora. In Yellowstone, long one of the nation’s iceboxes—a park where I’ve skied among geysers and watched wolves pursue stampeding elk—winter is, incredibly, shrinking. Much of Florida’s Ever-

Silence summons our attention more insistently than noise. Living in civilization corrupts the senses like that.

I rest my paddle across the kayak. The water of Johns Hopkins Inlet lies flat and still. There's no wind, just some barely audible hum in the distance, a few decibels cut adrift from a howl high in the mountains. A bald eagle screech pierces the quietude briefly but is suddenly gone, like a stone dropped into a pond. The silence feels dense enough to float atop on our backs, arms outstretched, eyes closed.

Yesterday, under an iridescently blue sky, we paddled to visit the source

We weaved among hundreds of floating and bobbing bergs, wildly sculpted by wind and waves.

of those frequent claps of white thunder, the Johns Hopkins Glacier, which rises a sheer 250 feet out of the water and stretches a mile across, spanning the inlet from cliff wall to cliff wall like a colossal white dam. We kayaked below gray waterfalls pouring over cliffs; we weaved among hundreds of floating and bobbing bergs, wildly sculpted by wind and waves. More than a thousand seals perched on distant bergs, while several swam closer, popping heads above water to watch us. The Hopkins

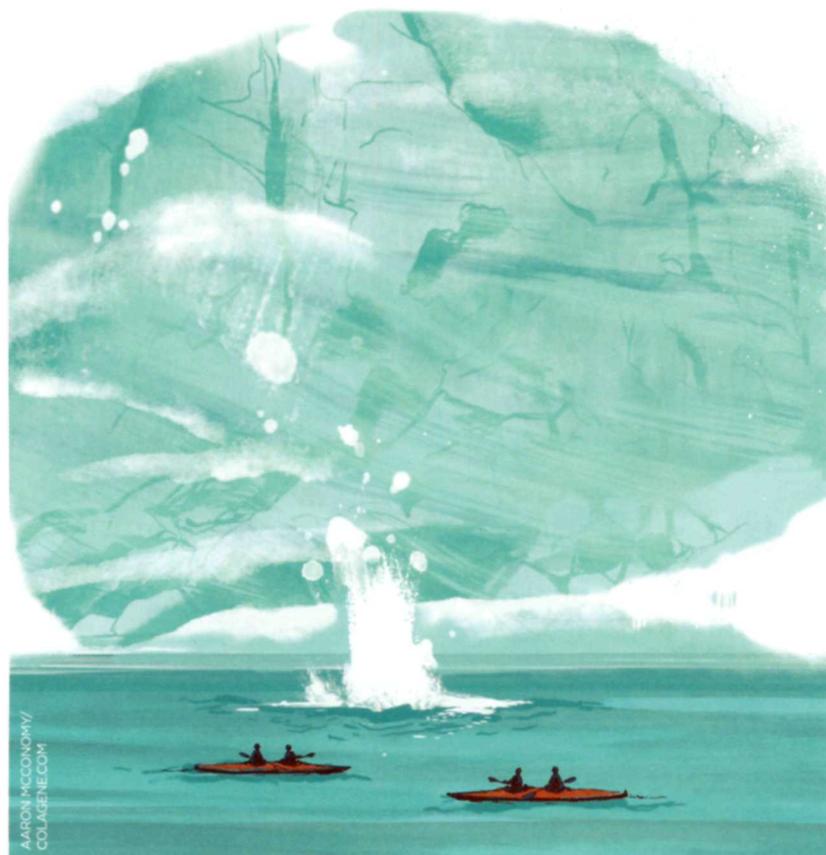
Glacier bellowed with each calving, every 15 or 20 minutes, as if warning us to stay away. Its frigid breath reddened our cheeks.

Sharing a kayak with Alex, I get to see this wilderness through a seven-year-old's eyes. I watch her reach out and touch a passing softball of compacted snowflakes from three centuries ago. We look up at a bald eagle in its nest atop a snag high up a nearby sea cliff. "He's watching the kayakers go by," Alex explains to me. When a harbor seal pokes its slicked head above water not 50 feet away, investigating us with dark eyes, I hear Alex faintly catch her breath as she and the seal exchange stares for an instant, before it disappears with a *bloop*.

At one point, I notice Alex slowly listing to starboard. When she sits upright again after about 40 minutes, I ask her, "How was your nap?" She smiles over her shoulder, pauses, and then tells me, "I like kayaking trips because you can sleep while your partner's paddling." Alex keeps promising to help me paddle, just as soon as the feeling moves her. She's been saying this for two days, and it cracks her up every time.

Our movements out here are just a sigh in the long, slow respiration of this place. In its rawness, Glacier Bay strips away the ornate vestments civilization tends to wrap around our lives. It reveals life as tenuous, and yet driven powerfully by the sole purpose of living.

Black crust, dryas, and spruce trees growing. Steller sea lions braying at one another in a cacophony



that bears a striking resemblance to the playground at my children's elementary school. Penny and I exercising caution in choosing where we pitch the tents that our kids will sleep in. Nate and Alex collecting shells on the beach on their long, circuitous voyage to becoming whole adults with a world perspective partly formed by picking up shells on a wilderness beach below thundering glaciers. Or all of us exulting in dipping a paddle in the water here—these are just different manifestations of the same mission. We live only to live. It's no more complex than that. Sometimes we just need to be reminded of it.

Now, on our final day of paddling,

a mist slowly coalesces into a steady shower, the kind of rain common from Southeast Alaska to the Pacific Northwest—not torrential, but more of a patient drowning. Nate, in the forward cockpit of my kayak, hunkers down inside his rain slicker and hood, folding in on himself against the invasive chill.

"What are you going to tell your buddies at home about this trip?" I ask him, to gauge his mood.

From under his hood, Nate responds, "I think I'm going to need about a week to tell them all the stories from this trip."

My boy's words warm my chest like a hot drink.

We trace a shoreline of mossy cliffs

where one waterfall after another flutters like a white ribbon. A bald eagle perches in a snag high up a cliff; in a nest not far off, its mate stretches wet wings. A porpoise surfaces and dives.

The final act of the Ice Age is an impressive performance. But the show is a mystery that leaves many questions unanswered, including how and when it will end. **NP**

MICHAEL LANZA is the Northwest editor of *Backpacker* and creator of *TheBigOutside.com*. This article is adapted from his new book *Before They're Gone: A Family's Year-Long Quest to Explore America's Most Endangered National Parks*, published by Beacon Press.



It's Like a Savings Bond for the National Parks.

It's better to give than to receive, but what if you could do both? Donate \$10,000 or more to NPCA as a charitable annuity, and we'll provide you with a great rate of return the rest of your life, as well as considerable tax savings. Why leave your money in a bank when it could be doing more for you and for our national parks?

To learn more, call Morgan Dodd toll-free at 877.468.5775 or visit www.npca.org/giftplanning.

Annual rate of return is guaranteed for your life, and determined by your age at the time of the donation:

Age:	65	75	85	90
Rate:	4.7%	5.8%	7.8%	9.0%





VISIT AMERICA'S
LARGEST NATIONAL PARK

Alaska

**KENNICOTT
Glacier Lodge**

Gracious hospitality and fine dining in the heart of the Wrangell-St. Elias National Park. Historic mines, spectacular glaciers, great hiking, flightseeing, rafting

www.KennicottLodge.com 800-987-6773

*The Maine
Windjammer
Association*

Come Sail Away

Enjoy great sailing by day and cozy anchorages at night. Your adventure includes delicious meals, shore trips, wildlife, spectacular scenery and a lobster bake. Choose from 13 historic windjammers sailing from Camden, Rockport and Rockland on 3- to 6-day cruises. *Prices start at \$400.*

Includes FREE PASS to ACADIA NATIONAL PARK

1-800-807-WIND www.sailmainecoast.com

**Fort Union
National Historic Site**

experience
the
History

enjoy
the
Adventure

Williston CVB
convention & visitors bureau

800-615-9041
www.visitwilliston.com

Hawaiian Kings Tour

The Best 2-Week, 4-Island Vacation Available At The Most Affordable Price!

15 Days *Weekly Departures* from **\$1768***

"Carefree" best describes your vacation starting with your Polynesian tour director meeting you at the Honolulu airport. Spend 5 nights in Waikiki Beach (Honolulu) on **Oahu**; 3 nights on **Kauai**; 2 on **Maui**; 1 night in Hilo and 3 in Kona, on **Hawaii** ("the-big-island"). Escorted sightseeing includes a city tour of Honolulu, Punchbowl Crater and Pearl Harbor, the Wailua River Boat Cruise, The Old Whaling Capital of Lahaina, the Iao Valley, Hilo Orchid Gardens, Rainbow Falls, Black Sand Beaches, Volcanoes National Park and more. Includes: hotel accommodations, taxes, inter-island flights, baggage handling, escort, & sightseeing. *Price per person, based on double occupancy. Airfare is extra. Seasonal rates may apply.

Rose Parade, Las Vegas, Grand Canyon & Arizona Tour

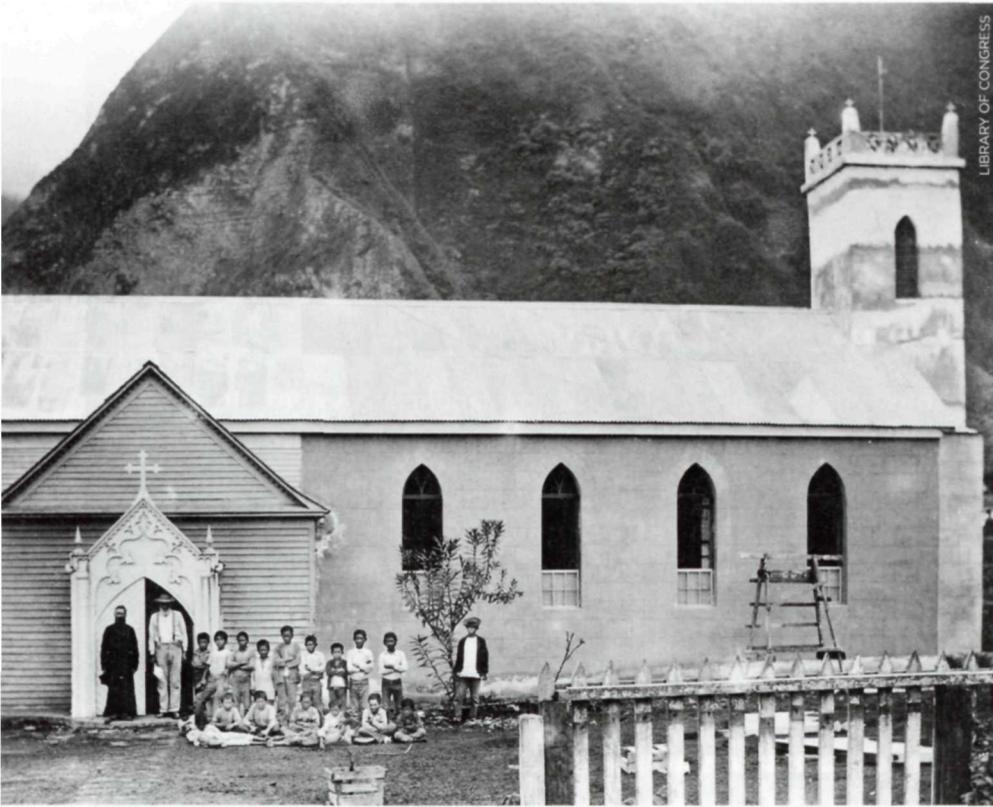
Sedona & Red Rocks – Phoenix & Scottsdale

11 Days *Departs December 29, 2012* from **\$1548***

Get away from the colder weather during the first week in January and enjoy the best New Year's Eve and New Year's Day you have had in years! Start in Los Angeles (4 nights) with a city tour of L.A., Hollywood, Beverly Hills, and an exclusive, pre-parade, after public hours, float building and viewing at the Rosemont Pavilion with included dinner. Watch the artists put the "finishing touches" on the floats unencumbered by public crowds! On Tuesday, January 1, 2013, **enjoy your reserved grandstand seats at the Rose Parade!** On Wednesday, January 2, depart for Las Vegas (2 nights). The following day, travel to the **Grand Canyon** for your overnight stay in the park with an opportunity to marvel at the ever changing colors during the *sunset and sunrise*, with included breakfast. Then depart to another astonishing landscape - the **Red Rocks** of Sedona. You will also visit Montezuma's Castle enroute to Phoenix and Scottsdale where you will spend your final two nights with an included city tour. *Price per person, based on double occupancy. Airfare is extra.

VMT
vacations
It's time to travel

**For details & itinerary call 7 days a week:
1-800-736-7300**



FATHER DAMIEN NOT ONLY MINISTERED at a church; he also grew crops and built homes, schools, and a reservoir for drinking water.

Exiled to Paradise

Kalaupapa National Historical Park celebrates the triumph of the human spirit over Hansen's disease.

AMBROSE T. HUTCHISON DISCOVERED the "dying den" on his second day at Kalaupapa in 1879. As Hutchison trod a dirt path in the shade of the coconut palms, a man wearing a white rag over his nose and mouth hurried past. The man pushed a wheelbarrow filled with stained and soiled rags to the entrance of a dilapidated hut, and then in one great heave, dumped the contents out. That's when Hutchison heard an "agonized moan" and realized there was a person in there.

"Hutchison watched in horror as a dying man crawled into the hut and collapsed face down. This "spectacle of inhumanity" filled him with such a sense of foreboding that Hutchison fled. Would he, too, die alone and abandoned? When a figure clothed in black appeared before him, his fate seemed certain. But it wasn't the grim reaper—it was a priest,

wearing gold-rimmed glasses and a stiff, brimmed hat.

"Good morning," said the priest with a broad smile. "I am Father Damien."

Thus began a friendship that would change Hutchison's life forever.

Religious missionaries first mentioned seeing "remediless and disgusting cases" of leprosy, or Hansen's disease, in the Hawaiian Islands around 1823. Caused by the bacteria *Mycobacterium leprae*, the disease slowly damages the skin and nervous system, causing sores, decreased sensation, paralysis, loss of fingers and toes, and, back then, death. By 1865, fear of this ancient affliction was so great in Hawai'i that the government signed into law *The Act to Prevent the Spread of Leprosy*. The legislation allowed authorities to confine "any person alleged to be a leper" and "assist in removing such a person to a place of treatment or isolation." Patients with mild symptoms were sent to Kalihi Hospital and Detention Center on Oahu; the worst were forced into isolation on the island of Molokai.

With its sandy beaches, misting rainbows, and lush valleys, Molokai's Kalaupapa Peninsula was a South Pacific paradise. But Hawaiian leaders sent victims of Hansen's disease here because of its Alcatraz-like inaccessibility, not its beauty. The world's highest sea cliffs separated the sick from the rest of Molokai; strong ocean currents, heavy surf, and tiger sharks deterred anyone from swimming away.

The first 12 patients arrived in January 1866, and as the rowboat took them from steamship to shore, they were told they'd never see their families again; they would die on Molokai. "Hawaiians are very resourceful people, but the first patients were out of their element as strangers in

an unfamiliar place,” says Ka`ohulani McGuire, cultural anthropologist at Kalaupapa National Historical Park. “They were literally spit out onto the land, without any infrastructure, food, water, or clothing.”

Too sick to hunt, farm, or fish, the patients began writing letters to religious institutions. Joseph De Veuster, better known as Father Damien (a Catholic priest from Belgium), had already spent nine years as a missionary on the Big Island when he responded to their cries for help.

He arrived in May 1873. Father Damien knew that serving these abandoned patients would be trying, but nothing prepared him for what he described as “the living cemetery that was Molokai.” Drunkenness, gambling, and theft were rampant, the sickest patients were dumped into the dying den, and dead bodies were discarded into dark ravines, to become food for feral pigs.

Father Damien ministered at a church on the eastern side of the peninsula but also worked as a carpenter, farmer, and teacher. “I am not ashamed to be a manual laborer for the glory of God,” he declared. Assisted by Mormon, Protestant, and Evangelical missionaries, as well as some courageous family members of patients, Father Damien grew crops; built homes, schools, and a reser-

Sea cliffs separated the sick from the rest of Molokai; strong ocean currents, heavy surf, and tiger sharks deterred anyone from swimming away.

voir for drinking water; and pleaded with the Hawaiian government and church officials to send more medical supplies, food, and clothing. Though most Board of Health officials kept a safe distance from the patients, Father Damien ate out of the same *poi* bowl, shared his tobacco pipe with them, and bandaged their wounds. When asked of his devotion, Father Damien said, “My greatest happiness is in serving the Lord in his poor and sick children who are rejected by others.”

Despite the sense of community Father Damien helped create, death was a daily reality. “There are many empty places in church,” he wrote to his brother in 1880, “but in the cemetery there is hardly any room at all.” Much of Father Damien’s time was spent building coffins, digging graves, and administering last rites. Like the boundless sky above Kalaupapa’s moody clouds, Father Damien urged his patients to identify with the Holy Spirit within, which remained untouched by death or disease.

But even Father Damien had his weaknesses, and eventually his body succumbed to the disease surround-

ing him. “I am gently going to my grave,” he stated. “It is the will of God and I thank him very much for letting me die of the same disease and in the same way as my lepers.” He died on April 15, 1889, in the company of Mother Marianne Cope and Brother Joseph Dutton, who would continue his work on Kalaupapa.

At its peak, 1,200 patients lived on Kalaupapa, and over the years, more than 8,000 called the peninsula home. Although the advent of sulfone drugs helped treat Hansen’s disease in the 1940s, segregation laws isolating the sick weren’t lifted until 1969. Just 11 years after that, Kalaupapa National Historical Park was created to tell the story of the island’s patients and the heroic volunteers who helped them. “It’s a story about overcoming adversity,” says the park’s superintendent, Steve Prokop. “Our goal is to help people understand how such an injustice happened and should never happen again.” **NP**

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

THE SAINTS OF KALAUPAPA:

Kalaupapa National Historical Park is the only Park Service site affiliated with saints. Father Damien was declared a saint by Pope Benedict XVI in 2009, and this October, Mother Marianne Cope will receive the same honor.

Father Damien, circa 1889.



HAWAII STATE ARCHIVE/AP PHOTO



GEORGE A. GRANT/NPS
HISTORIC PHOTOGRAPH CO.

FISHING IN YELLOWSTONE NATIONAL PARK, Wyoming, circa 1932.

**No Contracts. No Risks.[†]
Low Rates and Support
for Our National Parks!**



100% RISK FREE[†]

No contracts, no surprises-ever. You're in control. You can change your plan or add family members any time. And every plan is backed by a 30-days or 30-minutes money-back guarantee[†]. We are the #1 rated cell phone service in the nation.

AFFORDABLE RATES

Plans start as low as \$10/month. Our low rates will save you money-with plans for any usage need. And free, automated Usage Alerts help ensure you never receive a surprise bill.

GREAT PHONE CHOICES

Phones from the world's leading makers. Affordable flip style, big button senior friendly, or touch touch screen smartphones. We have what you want-plus FREE shipping.

Available at **sears**

**#1 RATED
CELL-PHONE
SERVICE**

We're helping protect our national parks for future generations



Our national parks are living, breathing monuments to our nation's history, culture, and landscape. They need our care and support to overcome the many dangers that threaten to destroy them forever.

Join the National Parks Conservation Association, along with Consumer Cellular to ensure our national parks get that vital care and support...now and into the future.

Consumer Cellular[®] will donate up to \$5 to the NPCA when you sign up for e-billing.

**CALL CONSUMER CELLULAR 888-589-9654
OR VISIT www.ConsumerCellular.com/NPCA**

Consumer Cellular[®]

AARP[®] | Discounts

AARP members ask for your special discounts when starting new service!

Phone purchase requires new service activation on approved credit. Cellular service is not available in all areas and is subject to system limitations. Phones are limited to stock on hand. Terms and Conditions subject to change. †If you're not satisfied within 30 days or 30 minutes of usage, whichever comes first, cancel and pay nothing, no questions asked.

AARP member benefits are provided by third parties, not by AARP or its affiliates. Providers pay a royalty fee to AARP for the use of AARP's intellectual property. These fees are used for the general purposes of AARP. Provider offers are subject to change and may have restrictions. Please contact the provider directly for details.

TRAIL VIEW

SEE

THE NATIONAL PARKS
LIKE NEVER BEFORE

NATUREVALLEYTRAILVIEW.COM



BROUGHT TO YOU  BY NATURE VALLEY