

The Journal of the Association of National Park Rangers

RANGER

Stewards for parks, visitors & each other

100 years of parks and public health



Vol. 37, No. 1 | Winter 2021

Contents

Winter
2021

Celebrate the stewards who keep the NPS safe

Editor's
notes

— Melissa DeVaughn

- 3**
President's message
- 4**
OPH: A century of support
- 6**
Healthy Parks Healthy People: Embracing the benefits of park immersion
- 7**
Engineers at Work : Office of Public Health engineers take on parks' biggest challenges
- 8**
COVID-19 Response: Office of Public Health experts lead charge on COVID containment
- 10**
Yosemite wellness: OPH helps operate vital community clinic in the park
- 11**
Field Services: Putting out public health fires
- 12**
Backcountry know-how: A tough & fun job
- 14**
One Health: Connecting the planet & parks
Field Services: Food-safety inspections keep visitors safe
- 16**
An answer to NPS' housing shortage
- 18**
Ranger Rendezvous 43.0: A new era
- 20**
Behind the computer screen at RR 43.0
- 21**
Welcome to the ANPR family & Kudos
- 22**
Cultural Resources: A better alternative for commemorative statues
- 23**
The Life Century Club

On the cover: OPH Deputy Director Sonya Coakley, and Director of the Office of Public Health Capt. Sara Newman stand united. Photo: Sara Hargrove

WAS ON A PLANE FROM MY HOME IN ALASKA TO VIRGINIA, ON MY WAY TO BE with family as my father eased his way out of this world, when news of a deadly virus from Wuhan, China, began airing on U.S. news stations. When I landed in Virginia, woefully ill-informed of the virus that would soon consume the world's attention, my brother-in-law jokingly said he couldn't give me a hug, and my mother asked why wasn't I wearing a mask? It was late February 2020, and I had no idea what they were talking about.

Never has a contagion so overwhelmed the world. By the time I left Virginia, in mid-March, the deadly virus was spreading like wildfire and I was eager to get home safely, yet worried about bringing sickness back with me. And those were just the early days of the COVID-19 pandemic.

Since then, life has been turned upside down for all of us. The power of this highly contagious illness to bring life to a screeching halt is mind-boggling. Not since the 1918 Spanish Flu epidemic has a contagion so disrupted both the country's economy and also the lives of its citizens.

So, the fact that we are ringing in the new year with the arrival of life-saving vaccines that will hopefully eradicate COVID-19 is reason enough to celebrate. The medical professionals and scientists who created these vaccines deserve our everlasting gratitude, as do the first responders who have offered so much care.

It is fitting then, that our first *Ranger* magazine issue of 2021 celebrates the importance of these public health professionals. This year, the Office of Public Health, a program embedded in the National Park Service directorate of Visitor and Resource Protection, commemorates its 100-year anniversary of the partnership between the U.S. Public Health Service with the NPS. The OPH, mostly staffed by PHS Commissioned Corps officers, serves like an internal health department for the NPS, providing response and prevention services that range from testing water for contaminants and inspecting food vendors to responding to, and preventing outbreak of, disease and infection. The OPH also promotes our parks as a health resource.

The OPH's presence in the NPS is a mutually beneficial relationship that has helped keep visitors safe and allows Park Service employees to feel secure.

I invite you to learn more about this vital partnership with our "Office of Public Health" issue; many thanks to the PHS Commissioned Corps officers and support staff who worked tirelessly since July to put these stories together for you. Look for the accompanying NPS-OPH logo, shown here, on all of the OPH stories in this month's magazine. Additional OPH stories will be presented throughout the year in each of our quarterly issues, so be on the lookout for that logo.

As your new editor of *Ranger* magazine, I also take this opportunity to say hello, how are you, and please drop me a line! From working with the OPH staff on these stories, to taking part in my first Ranger Rendezvous – albeit virtually (read more about it on pages 18-21) – I am humbled by all the hard work that goes on every day, by so many people committed to maintaining our parklands.

If you have a story you want to write – or just pass on an idea – I'd love to hear from you. As I've learned in just the few short months I've been part of this magazine, the story possibilities are endless and the enthusiasm impressive. Reach me at mdevaughn@anpr.org.



— Melissa DeVaughn
Ranger magazine editor

RANGER

THE JOURNAL OF THE ASSOCIATION OF NATIONAL PARK RANGERS
Vol. 37, No. 1 Winter 2020-21

Ranger (ISSN 1074-0678) is a quarterly publication of the Association of National Park Rangers, an organization created to communicate for, about and with National Park Service employees of all disciplines; to promote and enhance the professions, spirit and mission of National Park Service employees; to support management and the perpetuation of the National Park Service and the National Park System; and to provide a forum for professional enrichment.

In meeting these purposes, the Association provides education and other training to develop and/or improve the knowledge and skills of park professionals and those interested in the stewardship of national parks; provides a forum for discussion of common concerns of all employees; and provides information to the public.

The membership of ANPR is comprised of individuals who are entrusted with and committed to the care, study, explanation and/or protection of those natural, cultural and recreational resources included in the National Park System, and persons who support these efforts.

ANPR business address P.O. Box 151432, Alexandria, VA 22315-9998, anpr.org. Members receive *Ranger* as part of their membership dues. See the website or *Ranger* for membership/subscription details.

FINAL DEADLINES

Spring issue Jan. 31
Summer issue April 30
Fall issue June 30
Winter issue Nov. 15



BOARD OF DIRECTORS

Officers

President Paul Anderson, RETI
Past President Jan Lemons, WOTR
Secretary Lauren Kopplin, DINO
Treasurer Bill Wade, RETI

Board Members

Education & Training Tom Banks, OC
Fundraising Activities Jeanette Meleen, WIHO
Internal Communications Elsa Hansen, SEUG
Membership Services Reghan Tank, XNPS
Professional Issues Tim Moore, NAMA
Seasonal Perspectives Lauren DeGennaro, MISS
Strategic Planning Jonathan Shafer, NCRO
Government Affairs Rebecca Harriett, RETI

Staff

Membership Services Chris Reinhardt

Ranger Magazine

Editor/Publisher Melissa DeVaughn

Professional Ranger section

Cultural resources Alan Spears, NPCA
Interpretation Brian Forist, IU
Protection Kevin Moses, SHEN
In Print Rick Smith, RETI

Copyright © 2021. All rights reserved. Articles and images in this publication are the sole property of ANPR and *Ranger* magazine, except where otherwise indicated. Republication in whole or part is not allowed without written permission.

A resilient new year lies ahead for ANPR

President's message

— Paul R. Anderson

IT HAS BEEN A DIFFICULT, CHALLENGING year – for the world, the nation, the National Park Service, all of the amazing National Park Service employees and partners, and for the Association of National Park Rangers. Through it all, you have risen to the challenges, overcome the obstacles, solved the problems, and professionally continued to protect the parks, the public and each other. It is reasonable to expect that folks are tired and stressed from the unrelenting pressures of life during the COVID-19 pandemic. But everyone needs to take time out at the end of the old year and the beginning of the new to pat yourselves and each other on the back for what you have accomplished this year under the most difficult circumstances. Thank you for your service to the national parks, to America and to each other! I sincerely hope 2021 will be a better year for us all.

With challenge comes innovation, and we've seen plenty of that this year. Distance learning, virtual park visits, working at home, virtual meetings, online training – it seems that the pandemic has instigated a new era in how we work together and do our jobs. I am continually amazed at the many wonderful products that have come out of the national parks this past year. In August, the ANPR Board of Directors was forced to cancel the in-person Ranger Rendezvous for the first time since 1999. Then three of our members under the leadership of Rendezvous Coordinator, Bill Wade, stepped up to design and present a “virtual Ranger Rendezvous.” I admit I was skeptical about their chances of success. But boy was I wrong! As more than 100 of you who attended witnessed, they did an exceptional job under tight deadlines and with some overwhelming last-minute challenges. They provided a substantive, inspirational, educational, fun set of plenary sessions, workshops, contests and hospitality rooms that were worth far more than the price of admission! Special thanks to all who made virtual Ranger Rendezvous 43.0 a tremendous success, and especially to Jamie Richards, Chris



Reinhardt and Jonathan Shafer who shouldered the majority of the heavy lifting! From the opening presentations by Associate Director Jennifer Flynn, Acting Associate Director Kerry

Olson, and Deputy Director Shawn Bengte to the closing plenaries by Shelton Johnson and Deb Liggett, this Rendezvous had something wonderful for all who attended.

Also, a special shout-out goes to ANPR's 2020 Member Excellence award winners Jamie Richards and Jonathan Shafer, and ANPR's President's Award recipient, JT Townsend.

This issue of *Ranger* magazine celebrates the 100th anniversary of the agreement between the National Park Service and the U.S. Public Health Service, which formed the National Park Service Office of Public Health. Through this extraordinary partnership, dozens of commissioned Public Health Service officers are stationed at the National Park Service's Washington office, regional offices and in some of the parks. These dedicated professionals have provided infectious disease surveillance and control, occupational health and safety, facility engineering, clinical services, consulting, and inspection of our hundreds of water and wastewater systems, facilities and food services.

Today these NPS OPH officers are helping guide the Service and Department of Interior decision-making on its COVID-19 response, the largest, most complex public-health response in park history! As you read this issue, let us all celebrate and be thankful for that 100-year partnership, and look forward to the next century of cooperation with the U.S. Public Health Service to preserve, promote and protect public health in the National Park System.

— Paul R. Anderson
ANPR President

A century of support

Office of Public Health helps keep National Parks pristine

100 YEARS

By Capt. Sara Newman and Melissa DeV Vaughn

FOR 100 YEARS, THE NATIONAL PARK SERVICE HAS been dedicated to protecting health and promoting parks as a health resource for visitors. In fact, the NPS is the only land management agency in the United States with an Office of Public Health (OPH) working behind the scenes to make sure that those of us who frequent our National Parks can focus on what matters: stunning peaks, lush forests and abundant wildlife, among so much more.

“The work we do mitigates the risk of visitors getting sick from the water, food, wildlife or insects that can transmit diseases, and allows the public to enjoy our nation’s parks and get healthy,” says OPH director, Dr. Sara Newman, a captain in the U.S. Public Health Service (USPHS) and one of nearly 60 USPHS Commissioned Corps officers assigned to NPS from the Department of Health and Human Services.

The NPS could not operate without that work, either, says Deny Galvin, who had a 38-year career in the NPS, nine of those as deputy director under three administrations.

“They’re really partners in making these systems work in the parks,” Galvin says. “In lobbying for the creation of the NPS, Stephen Mather (its first director) said he wanted to keep the agency small and efficient without a lot of overhead. The creation of cooperative agreements with those with ‘outhouse expertise’ really comes out of that outlook that Mather had.”

Since 1921, the NPS has formally partnered with the USPHS to assign officers to address the public health issues in national parks. Even before that, the seeds of this relationship were planted. In 1918, Yellowstone’s acting superintendent Chester A. Lindsley expressed concern about unsanitary conditions at the park, and USPHS sanitary engineer Lt. Everett Judson was sent to document the condition of the water and wastewater systems there. Lindsley outlined the steps needed to remedy the inadequacies in a report that is among the first of many documents showing the cross-agency cooperation between NPS and USPHS.

Today the OPH continues to protect and promote the health of employees and visitors on public lands. However, as the scope of public health has

grown, so has the diversity of public health professionals required to meet the public health needs of the Service. In addition to engineers, there are environmental health officers who make sure food is safe, test water for contaminants, inspect wastewater operations and work with OPH epidemiologists (a medical doctor and a veterinarian) to conduct disease surveillance, outbreak investigation, and implement mitigation strategies to protect park visitors from infectious disease. Think of the OPH as an internal health department, there to provide support for parks on public health issues through prevention and response services.

In addition to the 22 officers and three civilians assigned to the OPH, there are approximately 40 other officers assigned directly to parks or regions to support occupational health, engineering and clinical needs across the Service. And in 2009, the agreement between the NPS and the USPHS expanded to all bureaus in the Department of the Interior (DOI), with several officers now assigned to U.S. Fish and Wildlife Service, the Bureau of Indian Affairs, and the DOI.

“We believe this original agreement could be the oldest between two federal agencies,” Newman said. “The need and demand then weren’t much different than today. We still have this anchor in inspecting NPS water, wastewater, food and dealing with the vectors of disease. The concerns about malaria and typhus back then now include a range of infectious disease concerns such as hantavirus, plague, rabies, and tickborne illnesses. And with a warming climate, we are seeing diseases in our nation that we once only saw in tropical areas of the globe, so demand for our services is growing.”

Perhaps no other time than now demonstrates the importance of this interagency agreement. With a coronavirus pandemic raging worldwide, life as most people know it has changed dramatically. But this OPH-NPS cooperation remains steadfast. OPH not only responds when a health crisis emerges, but more important, it works behind the scenes to prevent these incidents in the first place.

It’s a demanding job, with officers on the road for 12 to 17 weeks a year, going from park to park for inspections, Newman said. Not only must her staff

Since 1921, the NPS has formally partnered with the USPHS to assign officers to address the public health issues in national parks.



Some team members from the Office of Public Health at the Lincoln Memorial Reflecting Pool. **Back row, from left:** Cmdr. Kevin Bingley, Capt. Craig Ungerecht, Cmdr. Jonathan Blonk, Capt. Chris Glime, Lt. Mathew Kozler, Cmdr. Amanda Parris, Lt. Cmdr. Stephanie Bridges, Cmdr. Bill Fournier, and Cmdr. Jeremy Mason. **Middle row:** OPH Deputy Director Sonya Coakley, Lt. Cmdr. Jessica Sharpe, Lt. Cmdr. George Carroll, Capt. Sara Newman, and Lt. Cmdr. David Kostamo. **Kneeling:** Cmdr. Kurt Kesteloot and Cmdr. George Larsen. Photo: Office of Public Health

be qualified to conduct inspections, but they also need to be multitalented in many other ways.

“Our officers have three skillsets in one: They are engineers, they are environmental health specialists and they are epidemiologists,” Newman said. “They inspect thousands of systems – many located in some of the most hard-to-reach places, requiring them to hike miles and miles or even take river rafts – to make sure visitors don’t get sick from food, and that the septic systems work.”

To be successful, she added, these officers must be highly effective communicators, excellent planners, and rely on quick and steady judgment to make lifesaving decisions.

“They are always there and they are always streamlined,” Galvin says. “If you look at the volume of the work they must do and the hours they put in, it is clear that it is a busy job.”

Newman further explains that USPHS Commissioned Corps officers assigned from HHS proudly serve with over 6,000 other officers who are also assigned to some 25 U.S. Federal agencies around the nation and the globe.

“We have a dual responsibility to the agencies to which we are assigned, and to our U.S. Surgeon General to protect, promote and advance the health of our nation,” Newman says.

U.S. Surgeon General Dr. Jerome Adams, a vice admiral in the USPHS, is a frequent park user with his family. He says he is honored to join the NPS in celebrating this 100-year partnership.

“There is no other agreement like this in our nation that provides such an important opportunity for our public health officials to make it safe for the American people to connect with nature and their most precious cultural resources to improve health,” he says. “I am proud of the hundreds of officers who have served our park system over the years and look forward to building our partnership into the future.”

LOOKING FORWARD

In recent years, the OPH has broadened its reach, promoting the health and well being of park visitors through its Health Promotion Branch and its Healthy Parks Healthy People program, with ties to a global movement to harness the power of parks and public lands as a health resource for all. It is an effort that is deeply rooted in the purpose and mission of the NPS, so dovetails smoothly between the two agencies. The recognition of parks as a source of health and healing for the American public was a primary inspiration for the founding of the NPS. The word ‘health’ is enshrined in the first set of NPS management principles set forth in 1916. In fact, the first annual report of the NPS identified that, in addition to “stimulating patriotism” and “diverting tourists travel to scenic areas of the United States,” a distinct function of the national parks was to “further health.”

As the OPH heads into its next 100 years with the NPS, Newman is optimistic that her office can further support parks as they face current and future challenges. From a warming climate that brings with it fires and floods, to racial health disparities, to the ever mutating face of such infectious diseases as COVID-19, the OPH has the expertise to address today’s most pressing issues, and to ultimately strengthen the NPS as a whole.

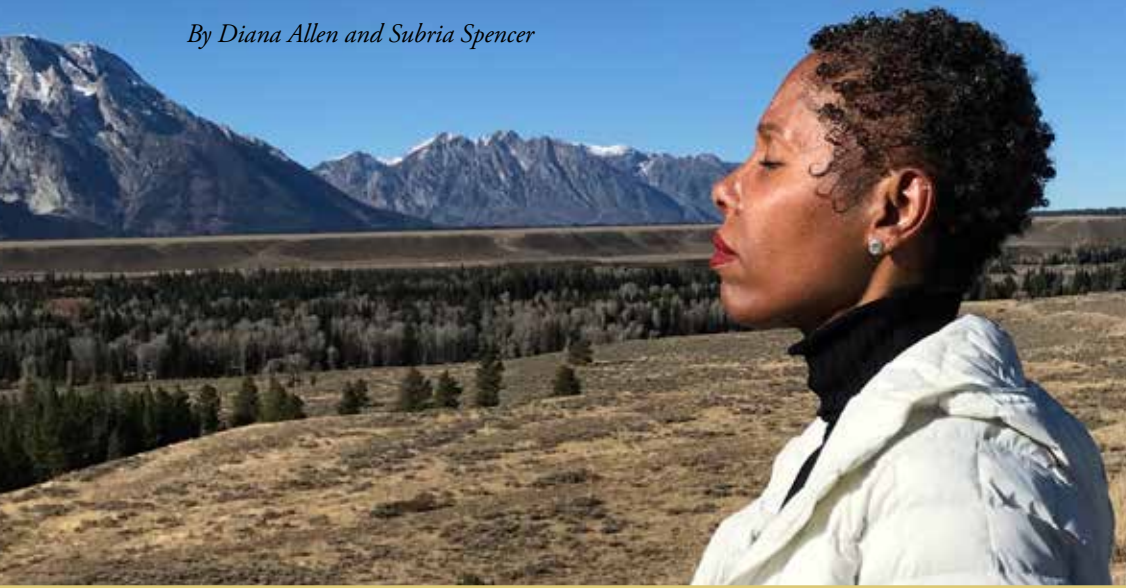
“I am proud of all we have done to support our parks in the last 100 years, but also excited about how the efforts of our park leaders and our public health experts assigned here can serve as a model for protecting and promoting health for all into the future,” says Newman.

Capt. Sara B. Newman, Dr.PH, MPH, is the U.S. Public Health Service’s director of the Office of Public Health, Visitor and Resource Protection, NPS. Melissa DeVaughn is Ranger magazine editor.

To get healthy, start with healing

Healthy Parks Healthy People harnesses nature's power

By Diana Allen and Subria Spencer



A park visitor takes in the mountain views at Grand Teton National Park. Photo: Diana Allen

SUNSET VISTAS. MOMENTS of awe. Miles of smiles.

Helping hands. These are a few of the hallmark experiences in our parks that can serve to help people lead healthier, happier, more fulfilled lives.

Today, in early 2021, with almost a year's worth of experience operating within the COVID-19 environment, the way we view health and our overall way of life has shifted. We are faced with incredible challenges and yet in the midst of it all, our parks are here for us. We offer a few insights into health promotion in our parks, with a focus on the role of parks as touchstones for healing, and crucibles of change.

PARKS ARE GOOD MEDICINE

The National Park Service Healthy Parks Healthy People program works to advance the fact that parks are cornerstones of people's physical, mental, and spiritual health, social wellbeing, and sustainability of the planet. The National Park Service has long been recognized as the custodian of our most treasured landscapes, cityscapes, and seascapes, as well as the cultural sites and stories that have formed this nation. These resources – that nurture, sustain, and inspire us – are now being appreciated and understood for what they are: valuable health resources.

These are challenging times. But there is a promising aspect to the pandemic. When there is less traffic, the air is cleaner, the night skies are clearer and the stars more vivid. Many of our waterways lost their turbidity and became crystal clear. We could see the fish and even the birdsongs became more melodious. All of this enhanced natural beauty is stirring in many of us a new consciousness of a few things that we need to change.

The science is clear: Parks are good for us. Getting outdoors can improve your mood and boost your immunity. Spending time in nature is good for children's development, the vitality of our communities and returns economic and environmental benefits. When people experience and connect with nature they are also more likely to act in ways that benefit the earth. It inspires them to solve problems more cooperatively and creatively, and be more generous to others. In the face of illness, contact with nature can speed rates of recovery, reduce anxiety, and reduce pain.

Time spent in nature, be it through exercise or relaxation, contributes to tangible health benefits that help us avoid the onset of chronic disease like high blood pressure, diabetes, and depression.



“The NPS Healthy Parks Healthy People vision is for parks to help create a healthy, just and sustainable world.”

— Diana Allen, Health Promotion Branch Chief, Office of Public Health

Secure in this knowledge, we have an obligation to provide access to parks for the people who need it most especially during this time.

NATURE HEALS

With this knowledge, we also understand the current reality. Many are disconnected from the healing effects of nature and our nation's parks. We know that black and brown communities face health disparities that place them at a higher risk for developing

chronic diseases and complications from COVID-19. These communities have also faced historical barriers that have inhibited access to enjoying our parks. It is a disparity that can, and should, be remedied. Our parks can serve as places for respite and healing for all and as ambassadors of health, we can further amplify this message.

Your Park Your Health is one such message, a program that strives to engage negatively impacted communities. Your Park Your Health provides opportunities that inspire lifelong personal connections between people, history, nature, parks and health. It addresses health disparities through collaborative partnerships and meaningful projects such as the NPS film, “Twenty & Odd.”

HEALTHY PARKS NEEDS YOU

As the nation continues to move through and beyond the COVID-19 pandemic, parks will serve as essential resources for creating a new national narrative to carry us into a new season of hope and healing. This narrative ensures everyone feels included, connected and empowered to engage in their own health journey.

Diana Allen is Health Promotion Branch Chief for the Office of Public Health. Subria Spencer is Communication and Education Specialist for OPH, and co-producer of the film “Twenty & Odd.” To watch the 4-minute film, visit go.nps.gov/twentyandodd.

Engineers

Creative minds help tackle
the unique challenges

at work

facing National Park Service lands today

By Lt. Cmdr. Gary Riley

THE CARR WILDFIRE BEGAN ALONGSIDE A HIGHWAY in Northern California's Whiskeytown National Recreation Area in late July 2018. The fire grew rapidly, swept into the city of Redding, and ultimately claimed seven lives, more than 1,000 homes and burned 229,651 acres. This was the sixth most destructive fire in California history. Faced with 97 percent of its land burned, the park immediately began the process of rebuilding historic buildings, an environmental education camp, and five of the six housing units in the park. Even after the flames were out, hazards to human and wildlife health remained.

Damaged infrastructure and ash can release hazardous levels of heavy metals, asbestos, and other byproducts of combustion into the environment. This is when a U.S. Public Health Service (PHS) engineer officer steps in to assess the fire-damaged structures, plan for safe debris removal, and prepare for rebuilding to ensure the site is safe for employees, visitors, and wildlife. I was the officer dispatched to the site to provide my expertise in public health engineering.

Few people associate public health with engineers, but in fact, the first officer assigned to the National Park Service (NPS) was a PHS Commissioned Corps sanitary engineer. Nearly 60 percent of the 58 PHS Commissioned Corps officers assigned to the NPS are engineers. These officers bring a health lens to traditional engineering fields, such as civil, environmental, sanitary, and structural, with the intent to prevent injury while protecting and advancing the health and safety of the public. OPH engineers provide design, maintenance, restoration, inspection, review, and regulatory oversight of thousands of facilities and assets across the 84 million acres of National Park Service lands. They serve all levels of the organization, from parks to regional and national offices, and the work they do protects and promotes health and prevents disease.

When I arrived on site, I had a tall order: to identify the hazardous contents of each structure and its surroundings that would need to be removed quickly and safely to protect both human and wildlife health. I quickly discovered that the ash and asbestos-containing material at many of the sites would need to be safely removed and disposed of at a landfill. Next, NPS collected soil samples from each building to ensure no contamination had migrated farther into the ground or groundwater. In some areas, up to a foot of soil was removed to meet clean-up goals.

I expanded the scope of the project to include community air monitoring during removal operations to protect NPS employees and visitors in nearby, open areas of Whiskeytown. The project removed more than 2,800 tons of material for proper disposal and we recycled 1,154 tons of concrete and 9.15 tons of metal debris. With the



Above, toxic ash is removed by the ton from the Carr Wildfire site in California's Whiskeytown National Recreation Area in 2018.

At right, Cmdr. Kurt Kesteloot, a public health consultant engineer, inspects a water fountain at Hot Springs National Park in Arkansas.

Photos: Office of Public Health



completion of the project, each of the building locations could safely be used for rebuilding anew or allowing sites to return to a natural state.

While an urgent response to a fire such as this may not be part of my regular duties, with the increased incidence of wildfires, I know I may need to be prepared for more of these kinds of responses in the future.

"One hundred years ago, the very first public health officer assigned to the National Park Service to protect health and safety was a sanitary engineer, responding to the needs of the time," says NPS Office of Public Health Director, Capt. Sara Newman. "Lt. Cmdr. Riley, along with the other 30 plus engineer officers assigned here to the NPS, are the backbone of public health responding to today's needs, and they will continue to be needed to respond to future challenges.

"Scientific predictions of up to six times more fires in the western U.S and 25 percent more fires in the Southwest will pose great harm to human and animal health, and the environment. We will need our engineers, not only to mitigate disaster when it hits, but more important, to help us find solutions to climate change to prevent the devastating consequences in the first place."

Lt. Cmdr. Gary Riley is Operations/Environmental Programs Branch Chief (Acting) for NPS, Pacific West Region in Seattle.



“I hear stories of park employees who show up every day for work and provide the care and attention to visitors and their colleagues that they always have, while also taking on precautions needed to prevent further spread – watching their distance, wearing a mask, washing their hands, cleaning and disinfecting, and staying home if sick.”

— Capt. Maria Said, MD, NPS-OPH medical epidemiologist



COVID-19 IN THE PARKS

Looking for the ‘pump handle’ while tackling a worldwide pandemic

By Capt. Maria Said

WE KNEW THIS WAS COMING.

Toward the end of January 2020, a small group of National Park Service and Department of the Interior employees involved in safety and health began to meet over a conference line to discuss a new virus circulating in Wuhan, China — a city name that has now become familiar. Our group came from different fields — medicine, veterinary medicine, environmental health, safety, and emergency management. We sometimes struggled with the conference line, which now, hundreds and perhaps thousands of Microsoft Teams calls later, seems unbelievable. Our calls were filled with questions. How did this virus spread? How infectious was it? How likely was it to kill? How long does it take between exposure to infection? How long do sick people remain infectious?

We didn’t have many answers then, but in retrospect, we were doing the right thing — identifying the right questions. What we were looking for was the pump handle.

The pump handle is well known to people in public health as a symbol for what we do. The image comes from the story of British doctor John Snow, considered to be the father of epidemiology, and his work stopping a cholera epidemic in a poor neighborhood in London in 1845. Back then, people still believed in the “miasma theory” — that people became sick because of “bad air.” John Snow, however, systematically traced the pattern of infections in the neighborhood, and although he was not able to identify the bacteria (*Vibrio cholerae*), his study pointed to one water pump on Broad Street as the source of infection. He per-

suaded the local government to remove the handle. Without the pump handle, people could not obtain water from that source that supplied water from a sewage-polluted section of the Thames River, and infections plummeted.

It’s this idea of getting to the source — of finding the pump handle — that fuels the practice of public health and its sub-specialty epidemiology, the study of the distribution and risk factors of diseases in specific populations. Rather than treat each cholera (or COVID-19) case, isn’t it better to stop



Cmdr. Jonathan Blonk measures fee collection booths for COVID-19 mitigations and employee protections at Gateway National Recreation Area in New York. Photo: Office of Public Health

people from getting the sickness in the first place?

A year later, we have learned so much about COVID-19. We know that this virus is spread primarily from person to person through respiratory transmission, that it is more infectious and lethal than flu, that it disproportionately affects some groups more than others, and that it is easy to kill through soap and water and standard household cleaners and disinfectants. We still have questions. What is the role of airborne transmission? What is the infectious dose? How infectious are asymptomatic and pre-symptomatic people compared to mildly, moderately, or severely ill people? How to convince people to adopt behaviors and actions that would slow the virus spread?

We always work with uncertainty. But the uncertainty can be hard. And like many others, as I roll into my desk chair every morning and dial into the first of countless calls, look at the mounting numbers, learn of new cases in parks, read about the disparities, struggle with my kids who are not in school, talk to friends who have lost their jobs, and see the shuttered storefronts around my neighborhood, I am tired. I also know that others have it harder than me. I hear stories of park employees who show up every day for work and provide the care and attention to visitors and their colleagues that they always have, while also taking on precautions needed to prevent further spread — watching their distance, wearing a mask, washing their hands, cleaning and disinfecting, and staying home if sick.

One of the questions that I often hear on the virtual town halls we have held with nearly 300 parks to date is, “When will this end?” In other words, “Where is the pump handle?”



Ranger Don Golec demonstrates a new extendable arm prototype at the Yellowstone National Park South Entrance, to keep social distancing measures in place. Photo: Jacob Frank / NPS

Tracking COVID-19 in the parks

In an effort to proactively identify increased transmission of COVID-19, isolate ill employees and prevent further infection, Yellowstone National Park, in partnership with the states of Montana and Wyoming as well as two surrounding county jurisdictions, has been conducting SARS-CoV-2 asymptomatic surveillance testing of its employees. As of Nov. 12, 2020, more than 3,800 tests have been conducted, with 19 positive results, including both asymptomatic and symptomatic employees. Aggregate testing results have been used to inform park employees, as well as state and local stakeholders, about the status of known COVID-19 transmission inside the park. When surveillance testing detected small clusters of COVID-19 positive employees, the data was also used to inform operational adjustments in the park to better protect employee and visitor health.

One limitation of surveillance testing is a lack of clarity on the accuracy of the tests in asymptomatic people. Interpretation of positive test results in asymptomatic individuals in areas of low disease prevalence is challenging because there is a greater chance of false positive results. This can potentially result in needlessly isolating employees. An additional challenge occurred as the COVID-19 incidence in Montana and Wyoming increased. As the capacity of testing laboratories became inadequate, the need to prioritize testing for those with symptoms or at high risk reduced the amount of testing resources available for asymptomatic surveillance testing. This created a continual need to adapt to changing conditions.

— Cmdr. George A. Larsen, Public Health Consultant, NPS OPH

NATURE HEALS

The truth is that we are dealing with something far beyond what John Snow faced. This is not one neighborhood with one source of infection. This is a virus that spreads more easily than cholera and more easily than flu in a world that is vastly different than 19th century London — a world with air travel, large cities, moving populations, disinformation and mistrust of science, and complex governances. There is not one pump handle.

And this, ultimately, is the key to work in public health — and why it can be both so frustrating and so satisfying. This is not the work of a single dragon-slayer; this work requires a vast team. That little team that began meeting a year ago was only one of many teams that has formed around the country. The NPS response has involved standing up national Incident Management Teams (IMT) and multiple regional IMTs. It has required individuals from different disciplines (human resources, law enforcement, public health and safety, interpretive rangers, EMS, and many others) to work together across a complex governmental system. It has required individuals in every park to take on new roles. Even within the

Office of Public Health, our Public Health Consultants, who have trained and worked in the field of environmental health and engineering, have transformed themselves into epidemiologists, working with each park to help support case identification and isolation, contact tracing, health monitoring, cleaning and disinfection, and coordinating with the local and state health departments.

There is no one pump handle. But the virus does require a single coordinated effort. We often hear, “We are all in this together.” On some days, when we see the gaps in the response, with people of color or from certain communities or backgrounds being hit so much harder than others, this may ring hollow. But it is not a platitude; it is a call to action. We are asked to do what John Snow did, plus a lot more. This is what makes our job in public health, which by now includes all of us, so challenging and so great. We knew this was coming, and it’s our collective action that determines where this will go.

Capt. Maria Said, MD, is a medical epidemiologist for the National Park Service Office of Public Health, and served as the first Incident Commander for the COVID-19 NPS Incident Management Team.

Partnering for community health in Yosemite

By *Cmdr. Keren Arkin Hilger*



From left, Cmdr. Keren Arkin Hilger, physician and medical director of the Yosemite Medical Clinic; Margaret Everson, counselor to the Secretary, exercising the delegated authority of the NPS director; Kate McGregor, deputy secretary; Chip Griffin, health systems administrator; Lt. Cmdr. George Carroll, regional Public Health Consultant; Lt. Aneida Shakya, clinical nurse; and Lt. Cmdr. Emily Gaffney, family nurse practitioner. Photo: Office of Public Health

HIKING UP YOSEMITE NATIONAL Park's scenic Mist Trail on a warm summer afternoon, a middle-aged visitor experienced sudden chest pain and realized he could not come down without assistance. His companion scrambled to find a cell signal and called 911. Yosemite's 911 dispatcher paged Yosemite Search and Rescue to carry the patient from the trail to an awaiting ambulance.

That ambulance – and the direction of care the hiker received from the paramedics inside – is part of an innovative agreement between the departments of Health and Human Services and Interior, to assign U.S. Public Health Service officers to the park's Yosemite Medical Clinic. These officers provide medical care to park employees, residents, community members, and visitors in a remote area where health care is limited. As the USPHS and NPS celebrate 100 years of interagency partnership in 2021, so too does the Yosemite Clinic celebrate a milestone. The clinic has successfully served the Yosemite community for 10 years, and serves as a model of successful community-park care.

TIME IS OF THE ESSENCE

Upon receiving the hiker, the Yosemite paramedic performed an EKG, noted the patient appeared to be having a heart attack, and contacted Yosemite EMS's Medical Control. "Med Control" is staffed by a USPHS commissioned officer (either a physician or an advanced practice provider), who offer medical direction

to EMS personnel. Given the hiker's serious condition, the paramedic called for an air ambulance, but the flight was delayed well beyond the usual 20- to 30-minute arrival timeframe. So, the Med Control officer instructed the ambulance crew to bring the patient to Yosemite Medical Clinic for immediate medical attention until the flight crew arrived. There, the patient received a temporizing medication that dissolves blood clots during heart attack. Shortly before the helicopter's arrival, the patient was transported by ambulance to a nearby landing zone where he was transferred to the aeromedical team and flown to a regional cardiac care center.

This episode, though not a typical Yosemite medical response, illustrates some of the critical roles played by USPHS officers assigned to YMC. A relatively remote duty station in a federally designated Medically Underserved Area, YMC serves one of the most heavily visited national parks in the United States (approximately 4 million visitors annually). The closest hospital is 90 minutes away by car, and the nearest cardiac care and trauma centers are 2½ hours away. Factors such as terrain, inclement weather, road conditions, and geographic isolation often present barriers to timely medical care.

Yosemite National Park has a long history of being home to "brick-and-mortar" medical facilities. In 1929, Lewis Memorial Hospital was established in the building now occupied by the Yosemite clinic. During World War II, the U.S. Navy converted the park's elegant Ahwahnee Hotel into a convalescent hospital. Lewis Memorial Hospital continued inpatient operations until 1975;



Lt. Cmdr. Emily Gaffney administers the COVID-19 vaccine on Day 1 of vaccinations to Yosemite NP Ranger Chad Andrews at the Yosemite Medical Clinic on Dec. 17, 2020. Photo: NPS / Jamie Richards

after that, outpatient services were available at Yosemite Medical Clinic until 2010 when contracted healthcare arrangements ended and the clinic went dark. The impact on the community was so great that park leadership implemented a clinic model in 2011 through a cooperative arrangement with USPHS.

CARING FOR THE COMMUNITY

Today, nestled among old-growth trees and in view of iconic geologic features such as Half Dome, the NPS-operated Yosemite Medical Clinic is staffed by civilian employees supporting the core USPHS team of four officers: a physician (who is both clinic and EMS medical director), an advanced practice provider, and two registered nurses.

The clinic sees 3,000 to 4,000 patient visits per year. Primary care, urgent care, and occupational services are provided along with ancillary services such as radiography, point-of-care lab testing, laboratory send outs, dispensary, spirometry and audiometry. Visitors to Yosemite and over 3,000 park residents and employees comprise the target population.

During the COVID-19 pandemic, Yosemite Medical Clinic's officers were deemed "mission critical" by the USPHS. Applying their public health expertise, they modified operations – including establishing an outdoor clinic – to safely care for patients with symptoms suggestive of COVID-19. The physician served as medical expert on the park's Incident Management Team, and the entire clinic team developed a contingency facility plan to hold COVID-19 patients overnight in the event they could not be transported to receiving hospitals.

Cmdr. Keren Arkin Hilger, MD, FACER, FAWM, is Medical Director of Yosemite Medical Clinic and Yosemite Emergency Medical Services.



Little brown bat. Photo: Ann Froschauer/ USFWS

All in a day's work: Putting out Public Health fires

By Capt. Chris Glime

THERE IS NEVER A DULL MOMENT FOR WE WHO WORK IN THE FIELD Services branch of the NPS Office of Public Health (OPH). One day our staff might be inspecting sewage systems, or a restaurant run by a park concessioner, and on another we're fielding calls regarding a potential disease outbreak.

Just such a scenario happened on a beautiful sunny day in August 2017, as I was inspecting a sewage lagoon system in Grand Tetons National Park. Suddenly, the phone rings and it is Capt. Maria Said, our NPS OPH medical epidemiologist. She asks how I'm doing, and when I reply, "Great! I'm in the Grand Tetons," she responds, "I know you are," – which is why she called me. My day very quickly changed. I immediately switched gears to respond to what I soon learned would be the largest reported mass bat exposure in U.S. history.

When I reached the exposure area, a Tetons park lodge, I immediately advised closure of the rooms where bats and their droppings were observed, while our epidemiologists coordinated with the health department to track down everyone potentially exposed. After weeks of follow up to track down those potentially exposed, providing guidance and information to the park, and ensuring the buildings were secured, we had the situation under control.

Back to my water and wastewater inspections, right?

Yes, but then two days later while resuming my inspections, I received a call from Salinas Pueblo Missions National Monument in New Mexico reporting that a squirrel in the park tested positive for plague. A prairie dog colony had died off from the plague in October 2016, at New Mexico's Valles Caldera National Preserve, and our work there to prevent its spread reminded us that we had to act fast.

Again, I immediately switched gears, contacted the park, assessed the situation and advised all dogs in the area to be prohibited from entering, and coordinated the application of an NPS-approved pesticide to the animal burrows in the park to kill the fleas that carry the plague.

The Field Services Branch is one of three branches (including Epidemiology and Health Promotion) in the NPS OPH, comprised of 17 of our 25 staff. We are charged with safeguarding our water, food, wastewater and recreational water systems in parks, and as this busy week shows, we never know how we will be called upon to do so. Sure, we inspect systems to prevent disease, but when disease threat is an immediate and present danger, we must pivot rapidly to stop the spread.

Capt. Chris Glime is a supervisory public health consultant with the U.S. Public Health Service Office of Public Health.



Capt. Chris Glime

A perspective on

FIELD SERVICES BACKCOUNTRY



Lt. Cmdr. Stephanie Coffey is one of 17 Field Services Public Health Consultants (PHCs) called to duty in the backcountry, as she is here, amid the brown bears of Katmai National Park & Preserve in Alaska. Photo: Office of Public Health

By Cmdr. Don Hoeschele and Cmdr. Bill Fournier

AS I RUSHED DOWNRIVER, HOLDING ON FOR DEAR LIFE THROUGH world-class rapids, I kept my eyes focused on the shoreline. Beautiful scenery, wildlife? No, I'm not a visitor on the vacation of my life – I am a United States Public Health Service Commissioned Corps officer assigned to the National Park Service looking to save a life and prevent visitors from getting ill. I'm looking for people, beached on the shore, setting up camp for lunch and dinner. The food and water our visitors consume on two-week excursions down the Colorado River are highly susceptible to contamination, and one meal gone wrong could destroy a dream vacation for an entire group of rafters. That's why I'm on the water scoping the shore, to conduct onsite public health inspections of food and water served by the river guides. These dedicated river guides are true partners. They permit me to inspect their kitchen and sanitary setups so I can help them follow the best public health practices to keep their clientele safe. On my current multiday trip, I will make my way downriver to visit with several guided groups.

Once water slows a little, I spot the first group of rafters setting up for an early lunch. Upon inspection, I notice that their coolers with the remaining food are almost out of ice. Calmly, I explain that without ice the perishable food would need to be immediately cooked or thrown away because it could grow harmful bacteria. I hop back on the river, with my raft trailing this group, and observe as the clever trip leader stops to barter ice for food with another



guide on the water. This is just one ingenious example of how our partners, whether they are park rangers, concessioners or contractors, handle uncertainty in the backcountry.

After finishing up the day's work, I head to an unoccupied beach, unload all the gear, set up camp, enjoy a short group hike into the canyon to look at archaeological sites, have dinner on the beach, talk of plans for the next day, and then head to my campsite at sundown for another evening under the perfectly clear blanket of stars. Happily, I will repeat this routine daily for the next eight to 10 days. Tomorrow I'll wake and say to myself, as I do each morning, "It's a tough job, but really, somebody must do it!"

Cmdr. Don Hoeschele is just one of 17 PHS Commissioned Corps officers assigned to the NPS Office of Public Health (OPH) who inspects food, drinking water, wastewater and recreational water, and sometimes these systems are in far-flung locations. His account, above, demonstrates how these officers often work. They must raft rivers; hike long, arduous trails in rain, snow, sleet; mountain bike through tough terrain; and camp in remote sites in austere conditions to ensure that the latrines, water systems, sewer systems, and food operations meet the regulatory requirements and are safe for visitor use.

LESS-THAN-GLAMOROUS WORK IN STUNNING PARKS

Cmdr. Bill Fournier is another OPH officer who spends a lot of his workdays in the backcountry.

"Much of the work that I do in the backcountry is removal of human waste," he says.

Recently, Fournier worked with Rocky Mountain and Zion National parks to have urine diversion toilets installed on some of

the popular backcountry trails. These toilets separate urine from feces, which significantly cuts back on the amount of human waste that needs to be removed, and as a bonus reduces pungent smells. Each year, thousands of pounds of human waste are removed from the backcountry by dedicated NPS staff including trails crew, maintenance workers, and backcountry rangers. In some backcountry park areas, like Zion, human waste can only be removed by helicopter. The installation of these toilets has cut the number of required helicopter trips in half, and has resulted in enormous cost savings for the NPS.

Fournier's favorite backcountry inspections are on the Green and Yampa rivers at Dinosaur National Monument. This park is renowned for its quarry containing prehistoric dinosaur bones. To conduct his inspections, Fournier, just like the visitors, must float downriver through the ancient canyons.

"On these rivers, I perform spot checks of the river guide concessions while they are cooking and serving food. I inspect the kitchens, observe food prep/cooking, handwash stations, bathroom setups, and review their illness reporting standards," says Fournier. "I check each river operator's plan for reporting illness that occurs on the river, and their medical evacuation plan."

When backpacking or rafting in the backcountry everything must be packed in and packed out. Visitors must either use the infamous "wag bags" and "groovers" to carry out their load.

"Wag bags are kind of like dog poop bags for humans. They allow people to collect and carry out human waste in wilderness areas safely and discreetly, without lugging a toilet around with them," says Fournier. Groovers are portable toilets used in the backcountry, he adds. They got their name because people used to use ammo cans, or other watertight cans as toilets, which left grooves on the back of their thighs.

DINO has an innovative solution for rafters as they come off the river. At the pull out there is a dump station that is specifically designed to clean out groovers. Waste is dumped into a sanitary sewer, and there is a station to clean them. There is even a separate handwash station for the unlucky individual to clean their hands

"The food and water our visitors consume on two-week excursions on the Colorado River are highly susceptible to contamination, and one meal gone wrong could destroy a dream vacation for a group of rafters."

—Cmdr. Don Hoeschele, OPH, Public Health Consultant

after dumping a weeks' worth of poo down the drain.

Performing inspections in the backcountry is time consuming, and it is impossible to inspect all operations working in these isolated locations.

"To reach more operators, we also hold educational trainings each year for backcountry concessioners," Fournier says. "This is an effective tool that allows us to interact with all of the operators and for them to learn from one another."

The on-site inspections in the backcountry offer excitement, challenge, and risk to OPH officers, but these inspections allow them to identify safety and health issues at the moment of delivery. When combined with routine training they offer at the on-site inspection and in the classroom, OPH provides effective tools to uphold public health standards and keep this rugged country safe for all visitors.

"The backcountry work can be tough, but it requires us to stay in great shape and we get to have a glimpse of some of the least visited but most beautiful places in the nation," Fournier says with a smile.

Cmdr. Don Hoeschele is a public health consultant for Grand Canyon National Park, Glen Canyon and Lake Mead National Recreation Areas and other parks in northern Arizona. Cmdr. Bill Fournier is a public health consultant for the Intermountain Region.



Office of Public Health Commissioned Corps officers travel into the backcountry to inspect such things as this toilet setup in Grand Teton National Park (left) and this river kitchen setup (right) along the Colorado River in Grand Canyon National Park. Photos: Office of Public Health

ONE HEALTH

How it's all interconnected

By *Cmdr. Danielle Buttke*



Cmdr. Danielle Buttke with a bison at Grand Canyon National Park. Photo: Office of Public Health

EVEN IF YOU HAVEN'T HEARD THE TERM 'ONE HEALTH' or seen the catchy graphics and new organizations touting One Health, I would bet you have felt it. If you are stuck inside because of the COVID-19 pandemic in your city, or hiding behind closed windows because of the wildfire smoke in your skies, or shuttered behind your windows because of the hurricanes on your doorstep, then you are experiencing first hand how closely your own health is connected to the health of the world around us.

One Health isn't a new idea, although the growing movement of physicians, veterinarians, environmental scientists, ecologists and conservationists working together may be. The recognition that our health is intimately linked to the health of animals and the land, water, and air that we share is an integral part of indigenous knowledge in nearly every ancient culture. Our industrialized culture, however is slowly catching up, and none too soon.

COVID-19, like Ebola, plague, Lyme disease, West Nile Virus, and

Food safety: OPH consultants safeguard what we eat

By *Capt. Craig Ungerecht and Lt. Cmdr. Tara Dondzila*

EVERY YEAR THE NATIONAL PARK SERVICE IS A HOST to special events and festivals in some of our nation's most iconic settings attracting visitors from around the world and showcasing not just beautiful vistas and historic structures, but a variety of food offered by temporary food vendors. These special events range from ones such as the New York City Marathon at Gateway National Recreation Area, the Folklife Festival in Washington D.C., or Earth Day at John Muir National Historic Site. Each event held in a national park brings its own unique food-safety challenges, requiring the guidance and oversight from the Office of Public Health (OPH).

Eat Drink San Francisco (EDSF) is one such event, held at Golden Gate National Recreation Area. This multiday festival celebrates the flavors of California and the world, and attracts some 4,000 participants each year.

Ensuring the public's safety is a monumental task. Consider the 2014 event:

Over the course of three days, more than 160 food vendors served guests during four separate service periods. Food-safety

planning began three months prior to the event, including reviewing the menu each vendor planned to serve, where the food would be prepared, how it would be transferred to the event, prepared at the venue, and finally served to the public.

"I have worked at hundreds of special events in my 18 years with NPS, and Eat, Drink San Francisco was one of the most challenging and rewarding," says Capt. Craig Ungerecht, Supervisory Public Health Consultant in the OPH. "Conducting 12 to 15 assessments within two hours requires quick thinking and effective communication skills especially when you consider dishes such as Beef Tartare, Summer Bean Salad, Beet Cured Smoked Salmon and Yellowfin Tuna Crudo, all within 20 minutes."

Those high-risk food items, Ungerecht notes, were especially important to safeguard. Forty assessments would have to occur prior to each service period within a two-hour time frame, requiring three public health consultants to make that work.



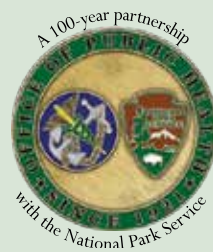
Lt. Cmdr. Tara Dondzila talks with a vendor during Eat Drink San Francisco. Photo: Office of Public Health



Zika virus — this list could go on and on — is a zoonotic disease, or one that can pass between humans and animals. Some 75 percent of all emerging infectious diseases are zoonotic. If it seems like there are more new diseases now than at any time in history or at least recent memory, it's true, and it isn't only because science has gotten better at detecting them. The ways humans interact with nature have the potential to create new diseases and spread existing ones, and for the past century humans have been dramatically altering natural habitats in accelerated ways that are actually amplifying disease emergence and spread.

The virus that causes COVID-19 is thought to have originated from wildlife species sold both legally and illegally in live-animal markets, and it is just one of many reminders that what humans are doing to nature has wide-ranging consequences. Animals may serve as reservoirs for many of these diseases, but the destruction of their habitat, trade in live markets, and introduction of other human-caused stressors is often making these animal populations sick and more prone to shed disease or spread it to a new host in the first place. When nature gets sick, we can get sick too.

At the same time, COVID-19 has also shown us just how much we depend on nature for healing. Many parks saw record visitation during the pandemic as we turn to nature for what the World Health Organization has called our greatest source of wellbeing. Time in nature improves our mental and physical health, can actually improve our immune and healing responses, and promotes



“When nature gets sick, we can get sick too.”

— Cmdr. Danielle Buttke

community health and resilience. This too, is One Health, and holds so much potential to help us fight and recover from the impacts of the pandemic.

Our hope is that the global pandemic helps more people understand the importance of keeping the natural world healthy and diverse, not only for the health of the planet but for ours as well. Whether it is preventing disease spillover, providing for mental health and wellbeing, or mitigating the impacts of climate change, protecting the health of all species and the parks that we share will hold benefits for generations to come.

To learn more about how The National Park Service is working to improve the health of humans, animals, and the environment while protecting and preserving our natural treasures visit the NPS One Health Website.

Cmdr. Danielle Buttke, DVM, PhD, MPH is a veterinarian and epidemiologist in a shared position as One Health Coordinator between the Biological Resources Division and the Office of Public Health.

“During the five years the event has been held in the park, no reports of foodborne illness have ever been reported,” Ungerecht says, underscoring the importance of prevention.

The OPH inspects more than 500 permanent food facilities in parks nationwide, but also provides oversight of thousands of temporary food services across the nation at both small and large events.

“We aim to inspect the permanent food sites two times a year, Ungerecht says. “For these temporary food events however, it is impossible for us to be on site to inspect all of them, but we do review thousands of plans every year, and in some cases, like EDSF, in person inspection is imperative.”

Lt. Cmdr Tara Dondzila was the park sanitarian at Golden Gate National Recreation Area from 2011 to 2018, where temporary food events are the norm. She had primary responsibility for conducting food safety inspections for roughly 80-100 temporary food events per year, including EDSF.

“I recall one inspection where a vendor did not properly cool tomato consommé according to FDA Food Code requirements,” Dondzila says. “To rectify the situation, we recruited other restaurants to assist this vendor to reheat the product adequately in order to allow the product to be served and reduce risk to public health.

“This is a good example of how events like these require on-the-spot problem solving and cross collaboration to protect the public from food borne illness,” she added.

This small detail could have prevented illness — but of course, no one will ever know. That is the goal of the work of the NPS Office of Public Health: to prevent illness or injury from happening in the first place.

Capt. Craig Ungerecht is a supervisory public health consultant with the Office of Public Health. Lt Cmdr. Tara Dondzila was park sanitarian at Golden Gate National Recreation Area from 2011 to 2018, and since 2020 has served as the Regional Public Health Consultant for the Midwest Region.



Lt. Cmdr. Ronan King and Cmdr. Amanda Parris inspect food at Independence National Historical Park in Philadelphia. Photo: Office of Public Health



Above left, walls are erected in multiplex housing units being built at Bandelier National Monument in New Mexico. Above right are the completed units, which will house seasonal employees. Photo: Courtesy NPS

Home is where the park is

NPS works to improve employee housing crunch

By Alicia Overby and Rick Maestas

A WELL-MANAGED EMPLOYEE- housing program is a critical part of supporting operations at many parks. Employee housing ensures essential staff are close to resources in remote areas, and is often necessary when appropriate housing is not available in the local community. Ensuring the stability, quality and affordability of employee housing affects not just park operations, but also employee morale.

In fiscal year 2020, 212 parks provided staff and volunteer housing through 5,515 units in single-family homes and multiplexes, apartments, dormitories and mobile homes. It is estimated that 7,500 staff and volunteers live in these units. Because these staff and volunteers live where they work alongside their colleagues, having a nice place to call home is important – but impressions of the quality of park housing differ. Though everyone has heard stories of housing that is in poor condition, data from required annual housing inspections shows that more than 64 percent of units service-wide are in good or excellent condition.

Recognizing the need to ensure that no employees live in substandard housing, NPS leadership launched an approximately \$100 million initiative in 2018 to remove, replace, or rehabilitate poor condition and obsolete housing at 24 parks. The new units being built by this initiative will be

standardized prototypes that better meet current code, fire, life safety, sustainability, and accessibility requirements. These prototypes also will increase efficiency and reduce costs, including operations, maintenance, and utilities costs, while more efficient use of square footage will reduce rent.

Creative construction

Parks are taking a proactive and sometimes creative approach to meet their housing project needs to provide suitable units. Bandelier National Monument will construct a multiplex housing unit at the Mesa Area near Frijoles Canyon Headquarters. The structure consists of a three-plex unit and an additional shower and laundry area for seasonal employees housed there. The project includes site work, utility improvements, revegetation and limited paving. The project will remove and replace two

trailers that pose a life and safety hazard to occupants due to ongoing hantavirus management and a lack of fire suppression systems.

Glacier National Park established a partnership with the nonprofit School-to-Work program at local high schools. Under these partnerships, the park provides building materials, tools, and construction supervision to construct cabins on the campus of the high school. Teams at these schools provide the majority of labor to construct the cabins, all to state and national standards. Once constructed, the cabins are transported by truck to the sites in the park that park crews have prepared with utilities to hook up once they arrive. Park crews prepare the site, extend the utilities, and hook up the cabins once they arrive.

Rent control

Just as many park employees are concerned about housing quality, they are also concerned about rental rates. Many factors affect rental rates – such as size, condition, and amenities – though employee income is not one of them (i.e., rent is based on the type of unit rather than the employee's salary). The better the unit, the higher the rent. But, the less the rent, the less rental income the park has to maintain the unit in good condition. Rent is set by the Department of the Interior (DOI) based on

NPS leadership launched an approximately \$100 million initiative in 2018 to remove, replace, or rehabilitate poor condition and obsolete housing at 24 parks.

requirements under Office of Management and Budget Circular A-45 “Rental and Construction of Government Housing.” Recent changes to Circular A-45 will bring rents more into line with the private sector, which will help parks fund operations and maintenance of housing. Changes to the rules that allow for rental deductions based on how far away a park is from the nearest community will result in rent increases for some.

Also, parks in high cost-of-living areas will see their rents over time become more in-line with the local community. Lastly, there will be two different dormitory rates: a lower rate for shared dorms (at least two tenants in a bedroom) and a higher rate for private, single dorms. Rent increases will begin to be phased in March of this year.

There are some steps that parks can take to reduce how these increases will affect employees. Park housing managers will have access to tools to assist with understanding the rental rate increases and affordability of units to inform decision making about employee assignments. The primary way to ensure that employees are paying reasonable rent is to make sure higher-paid employees are assigned to higher rent units, and lower-paid employees assigned to lower rent units. Additionally, rent can be split between unrelated tenants who share the same unit. Parks have time to consider reassignments because rent increases by \$100 a month or more can be gradually phased in every three months over the course of the year and increases of \$200 a month can be gradually phased in over two years. This will provide employees more time to explore their housing options.

While some employees will see rent increases, these changes should help improve housing quality because the additional rental income will enable parks to better maintain their housing units in safe, sanitary, and energy-efficient condition. This will benefit both the tenant’s quality of living and the park’s ability to better maintain the facilities.

Employee housing overall presents challenges, good and bad. The NPS is committed to tackling the efforts necessary to ensure parks have the support and tools needed to manage a better housing program. It takes a team and an interdisciplinary approach to support all aspects of park housing. Change can be scary, but it does not have to be when there is a collaborative effort within NPS to communicate, prepare and execute the goals, objectives and requirements of a housing program.

This article was co-written by National Park Service housing management specialists Alicia Overby and Rick Maestas.



Students from the School-to-Work program at a local high school near Glacier National Park helped construct cabins for park employees. At top, students consult the cabin plans during construction at their school. Once completed, the cabins were transported (middle) to the park. Park crews prepared the cabin sites and connected the building to utilities. Photos: Courtesy NPS

Ranger Rendezvous: Version 43.0

A few of the 'virtual conference' moments

WHEN THE COVID-19 pandemic forced ANPR's annual Ranger Rendezvous to shift to a virtual event, organizers hoped to keep it as close to the annual in-person conference as possible. While participants wouldn't be able to enjoy the camaraderie that comes from the social interactions that traditionally take place at the annual event, they could still exchange ideas via interactive online platforms and celebrate accomplishments that have taken place over the past year, despite the pandemic.

Ranger Rendezvous 43.0, the online version, attracted 120 participants over four days in October. Thanks to all who participated. Your registration allows you to go back and revisit the sessions highlighted below, as well as most of the other presentations from the conference. Visit <https://www.anpr.org/rr43/login.php> and enter your registration email for access.

For those who couldn't join us, here's a brief sampling of just a few of the hosted sessions.

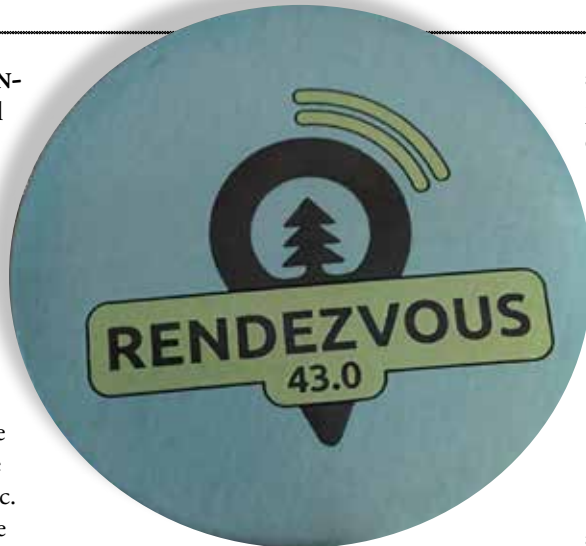
Also, save the date: RR 44 is being planned for Oct 12-17, live and in person in Jacksonville, Fla.

KEYNOTE PRESENTATIONS

Kerry Olson, NPS Acting Associate Director for Interpretation, Education and Volunteers; Jennifer Flynn, NPS Associate Director for Visitor and Resource Protection; Shawn Benge, NPS Deputy Director for Operations; and Deb Liggett, ANPR life member and retired superintendent; were the keynote speakers for this year's online event. Their collective message in their fields was one of endurance. The pandemic will



Kerry Olson, NPS Acting Associate Director for Interpretation, Education and Volunteers, during Ranger Rendezvous 43.0. Photo: Melissa DeVaughn



be past-tense soon, and there are positive things happening in the NPS, including the growth of digital content for those who can't physically visit a park.

"We know that in-site visits are our bread and butter," Olson said of the value of physical parks units. But think of pandemic-forced digital experiences as an 'and,' it's a plus, not an 'either/or,'" she said.

STRESS MANAGEMENT

Blue Courage, a group that works with police and other law enforcement, presented a session geared at helping NPS professionals handle the everyday stresses of what can be a sometimes highly anxiety-ridden job.

"We stress 'whole-person wellness,' which includes physical, spiritual, mental and emotional well-being," said Blue Courage presenter David Dubois "If you are engaged in protecting something that's important, and you are doing that in the public, you are exposed to the same types of challenge as police officers," he said.

RANGERS' ATTITUDES TOWARD COVID

Researcher Will Moreto presented results from his study examining how the COVID-19 pandemic impacted local conservation efforts

and the management and monitoring of protected areas. Over a two-month period, he surveyed and received more than 1,200 responses from protection officers around the globe. While the research is still being prepared for publication, the overriding results confirm that the pandemic has negatively impacted rangers' abilities to protect their parks.

WORLD RANGER CONGRESS

By Jeanette Meleen, ANPR Board Member for Fundraising Activities

The opportunity to travel halfway around the world to gather with over 500 park rangers who protect our world's most treasured and threatened places only comes along every three years. You better seize the opportunity when it comes! I decided that I wanted to go to a World Ranger Congress while attending ANPR's rendezvous in Bowling Green, Ky., in 2018. The following year, I applied for and received a scholarship from ANPR to help me get to the Ninth World Ranger Congress near Chitwan National Park, Nepal. Meeting and hearing stories from the world's rangers was humbling and educational, but most of all, it showed me that rangers everywhere want the same things. They also face the same challenges.

Throughout the five days of talks, plenary sessions, workshops, and social gatherings, I learned about challenges rangers face worldwide: government leaders who do not see conservation as priority; communities adjacent to protected areas having conflicting interests with rangers; climate change; lack of health insurance; insufficient wages; and inequality experienced by female and indigenous rangers. I learned that in some countries, the government sees ranger associations as threatening and therefore does not allow them. Despite these many challenges, the Congress made it clear that rangers everywhere do the work they do because they love the resources they protect, whether old-growth forests in Peru or gorillas in the Democratic Republic of the Congo. Rangers risk



The East Rapti River forms the boundary between Chitwan National Park and the town of Sauraha, in Nepal, location of the Ninth World Ranger Congress. Photo: Jeanette Meleen

their lives protecting threatened resources that once lost are gone forever. Rangers take these risks because they love what they do.

It was also clear that rangers worldwide want to be supported. This may mean earning an adequate enough wage to feed their families or having peace of mind to know their families will be taken care of if they are killed in the line of duty. Rangers also want proper training and equipment to be able to perform their work.

A supported ranger + capable ranger = conservation.

If you're thinking of attending a World Ranger Congress, I

highly recommend it! Buying the plane ticket can be the hardest part. Give yourself time before or after the Congress to explore the host country. Try to meet as many rangers from different countries as possible. Having meals with different groups each day will help. Bring trinkets and souvenirs from national parks in the United States to trade. Pack light. Keep an open mind. Attending a World Ranger Congress is a wonderful way to experience solidarity with our world's ranger family.

ONE PLANET ONE PARK

Longtime ranger Shelton Johnson fittingly wrapped up RR 43.0 with his "One Park, One Planet" message, about the sense of connection that comes with being a ranger – the gray and green that unites all professionals in the field, regardless of race and background.

"The uniform is an externalization of an internal process of becoming and a sense of self," he said, urging unification on and positive change with such issues as diversity, cultural parity and climate change.

— *Melissa DeVaughn*



Ranger Shelton Johnson plays a closing melody during his Ranger Rendezvous 43.0 presentation. Photo: Melissa DeVaughn



Enjoy the Outdoors™ ...with Pilot Rock Grills & Firerings

- Sizes & Designs for Single Camp or Picnic Sites & Group Areas.
- Wheelchair Accessible Designs.
- Painted Steel or Stainless Steel Fabrication.
- Charcoal Grills Offer Open or Covered Designs with 4 Cooking Grate Adjustment Methods.
- Campfire Rings Are Available in 4 Diameters, 6 Heights & 3 Cooking Grate Styles.
- Outdoor Cooking, The Campfire & Pilot Rock ... Three Camping Traditions.

GRILLS & FIRERINGS



RJ Thomas Mfg. Co., Inc. • Cherokee, Iowa • 800-762-5002 • customerservice@rjthomas.com • pilotrock.com

Benches • Picnic Tables • Trash Receptacles • Bear Resistant • Bike Racks • Custom Signs • Site Amenities • Charcoal Grills • Campfire Rings

Behind the Scenes Ranger Rendezvous 43.0

By Reghan Tank,
ANPR Board Member for Membership Services

ON JUNE 23, 2020, THE ANPR Board of Directors unanimously voted to cancel the 43rd Ranger Rendezvous. At that time, the in-person conference was less than four months away, Florida was a “hotspot” for COVID-19 infections, and the possible alternatives were unclear.

Luckily, the RR 43 planning committee immediately worked to transition the event to an online format. I spoke with Chris Reinhardt, ANPR’s business manager since January 2017, about his behind-the-scenes work, executing Ranger Rendezvous 43.0.

Reghan: What were your initial thoughts when the board voted to cancel in-person Rendezvous?

Chris: I was totally on board with the cancellation of the in-person Rendezvous. We couldn’t in good conscience have people travel to Florida, especially with the surge in cases there.

Tell me about the planning process that went into the virtual Rendezvous.

C: It was mostly Jamie’s [Richards] idea that we could do the virtual Rendezvous. She played a key role to say we could translate this work to a virtual event. She and I talked about the idea back in June before the event was canceled.

How did you devise the “43.0” idea?

C: At the beginning there was some question of whether we could even call it Ranger Rendezvous because of the requirements to have a membership meeting, etc. We wanted to make sure there was a little bit of separation there so it wasn’t confused for an in-person one. And also the 43.0 was a nod to the “virtual-ness” of it.

Tell us about the platforms you eventually settled on, Webex and YouTube.

C: The thing that we were going for was simplicity on the user end. One of the initial considerations we had was trying to

find a platform suitable for NPS employees to access. We had chosen another platform called Be.Live that we had tested out extensively and it (in a small group) worked well. Five days before the event we brought in some presenters to test it out, and it utterly flopped. I had signed up for emails from Webex, and we were able to link it to YouTube, so that’s what we went with. It was a little bit of a stressful few days – there was a lot of work to be done. Kudos to Jonathan Shafer and Jamie; we put in some late nights that week.

How did the time difference affect the planning? I know the time zone considerations made it hard to schedule everything to be fair for all participants, too.

C: That was the biggest point of contention. It was important that it felt like a real Rendezvous as far as the formatting went. We wanted it to be a cohesive four-day event. We thought of starting everything at noon, but we had so much content. We tried to limit the number of dual sessions, which proved really helpful because I was the only one with a functional computer that could broadcast to YouTube. So we had to expand the number of hours we were doing this.

Did you experience any difficulties during the actual event?

C: I was actually really shocked that we didn’t. I’ve never done this before. I was running live broadcasts from my bedroom. The power could have gone out and reset my Wi-Fi, or YouTube could have gone down. There were a million pieces that could have affected this. Our first broadcast was one of our most complex ones. We had three people come in at different times. The fact that the first one worked really helped because it gave me confidence that we could do this for the whole event.

As far as attendance, was 43.0 on par with past years of in-person Rendezvous?

C: We had about 100 people register and a few more trickled in for certain pre-



Chris Reinhardt, ANPR’s business manager, when he’s not at the computer. / Courtesy Chris Reinhardt

senters. Overall, I was surprised. Not disappointed to see familiar faces, but I would have expected the audience to be more expanded than what we saw. We thought we chose a price point that was approachable for all members, and we reached out to the membership to be a part of the event. What would have been the key thing we needed to have done to get more engagement? We need to know this before we proceed with any virtual events in the future.

Would you say RR 43.0 had more differences or more similarities compared to the planned in-person Rendezvous?

C: We effectively ran it the same way, which was important for keeping continuity in the organization. Now everything is set up so that we can do this again for shorter events if we want to. I don’t think I want to host an entirely virtual Rendezvous ever again, but we could do hour sessions or single trainings. A lot of the feedback was that our members want to be engaged with us. There is a lot of opportunity for ANPR to have more of a presence throughout the whole year now.

How do you see this experience shaping future Rendezvous events?

C: I hope the one thing that comes out of this is that we make Rendezvous more accessible to people who can’t take an entire week off to go to Florida or somewhere else in the country. I don’t think it will affect the format of Rendezvous in the future in any drastic way, but maybe we can have sort of a combination in the future. ✨

Welcome to the ANPR family

Here are the newest members of the Association of National Park Rangers
(updated 11/19/20)

- | | |
|--------------------|---------------------------|
| Scott Carpenter | <i>Bozeman, MT</i> |
| Denna Lucas | <i>Mineral, CA</i> |
| Naomi Boak | <i>Weston, CT</i> |
| Eric Ballein | <i>Waverly, OH</i> |
| Stacey Sigler | <i>Estes Park, CO</i> |
| Elizabeth Rupp | <i>Anchorage, AK</i> |
| Mariah Hensel | <i>Del Rio, TX</i> |
| Andrew Gregory | <i>Ravenna, OH</i> |
| Edward Miller | <i>Pittsford, NY</i> |
| Clayton Hanson | <i>Kremmling, CO</i> |
| Sharon Gladman | <i>Estes Park, CO</i> |
| Sarah Kivela | <i>Alamogordo, NM</i> |
| Michael Autenrieth | <i>Pine Plains, NY</i> |
| LuAnn Jones | <i>Alexandria, VA</i> |
| Melissa DeVaughn | <i>Eagle River, AK</i> |
| Kent Schlawin | <i>Johnston, IA</i> |
| Pauline Angelakis | <i>Hendersonville, NC</i> |
| Robert Johnson | <i>Weslaco, TX</i> |
| Nicholas Mann | <i>Knoxville, TN</i> |
| Thomas Griffiths | <i>Clinton, MO</i> |
| Emily Macklin | <i>Thornton, CO</i> |
| Reed Hopperstad | <i>Longmont, CO</i> |
| Amy McCann | <i>Medora, ND</i> |
| Jamie Bertram | <i>Cave Junction, OR</i> |
| Emily Buhr | <i>Denali Park, AK</i> |
| Brad Fishback | <i>Trenton, ME</i> |
| Jesse Harden | |
| Laura Shenk | |
| Linda Meyer | |
| James Larson | |



Kudos List

These people have either given someone a gift membership to ANPR or recruited a new member. Thanks for your help and support!

(updated 11/19/20)

- Colleen Derber
- Marla and Dean Shenk
- Paul Anderson
- Heather Larsen
- Lauren DeGennaro
- Tom Banks
- Clayton Hanson
- Jennifer Frost
- Ken Temple
- Judy Thompson
- Meg Weesener
- Reghan Tank



Photo: John Townsend

Townsend honored with President's Award

JOHN TOWNSEND, OR JT TO THOSE WHO KNOW HIM CLOSEST, IS THE RECIPIENT OF the 2020 Rick Gale President's Award, given annually to an ANPR member during Ranger Rendezvous. Townsend started his federal career in the summer of 1968, and his NPS career first at Shenandoah National Park, then in Washington D.C., Lake Mead National Recreation Area, Indiana Dunes National Park (once Lakeshore), and in the Midwest Regional Offices in Omaha, among other shorter-term assignments. He retired in October of 2004.

Townsend knew the President's Award namesake well, and said he is "humbled" to be placed in the same category as Rick Gale, a ranger known for his obsessive list-keeping and boisterous mint julep parties.

"To me, personally having Rick's name attached to this is meaningful," he said. "I spent many a road trip with Rick going to pistol matches, and we were at dinner in Washington D.C. on the night of 9/11. ... He was just a legendary guy."

Townsend was part of the original committee to create and manage the Harry Yount Award – an award he still feels should be aimed solely at "rangers who range." He also was part of ANPR's Birthday Centennial Committee, which was the force behind the ANPR's Oral History project. He and his wife, Flo Six, live in Newman Lake, Wash.

ANPR honors two Member Excellence recipients

ANPR president Paul Anderson also presented Member Excellence awards to two ANPR members, Jamie Richards and Jonathan Shafer. Richards is a former board member for Professional Issues and has helped contribute to the past three Ranger Rendezvous. Shafer is ANPR board member for Strategic Planning, a frequent contributor to ANPR marketing and news, and took a leading role in planning this year's Ranger Rendezvous.

ANPR election results

ANPR held its 2020 elections for seats open for the board. Congratulations to these board members for 2021, whose three-year terms began Jan. 1.

- Treasurer:** Bill Wade (re-elected)
- Board Member for Strategic Planning:** Jonathan Shafer (re-elected)
- Board Member for Internal Communications:** Elsa Hansen (re-elected)
- Board Member for Education and Training:** Tom Banks

A SPECIAL THANK-YOU

FOR SUPPORTING 2020 RANGER RENDEZVOUS



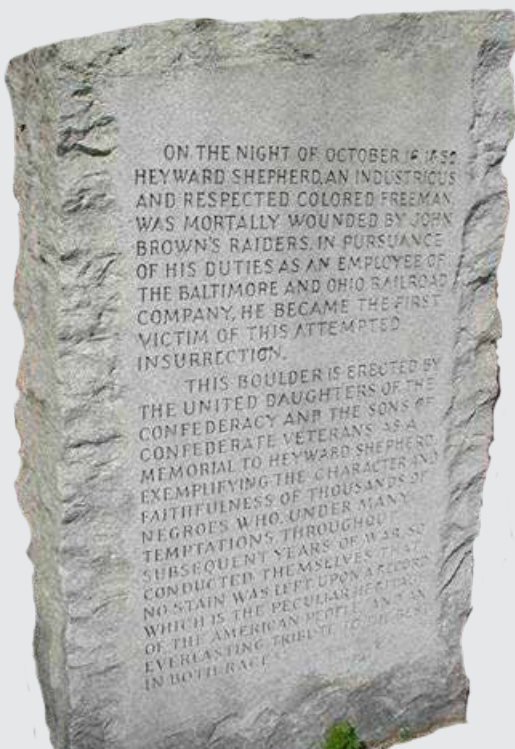
CULTURAL RESOURCES

Compromise and compassion

A third option exists for Confederate commemorative works in national parks



Above, a marker at Gettysburg National Military Park, for the 11th Mississippi Infantry Regiment, sits next to the white house and barn of Abraham Brian, a free African American. The two stories are inextricably linked, and an example of a worthy Confederate commemorative work. Below, a United Daughters of the Confederacy plaque at Harpers Ferry National Historical Park accurately conveys that one of the first people killed during John Brown's raid in October 1859 was a free black man named Heyward Shepherd, but inaccurately suggests that black soldiers supported the Confederacy. This, the author suggests, warrants the monument's removal.



THE MURDER OF GEORGE FLOYD BY MINNEAPOLIS POLICE officers on May 25, 2020, resurfaced ongoing national conversations about race, police brutality, and the need to confront and abolish systemic racism in the United States. These critical conversations intersected with national parks in multiple ways, with much of the focus centering on the issue of Confederate commemorative works located on landscapes managed by the National Park Service. Should they stay or should they go?

Those who regard Confederate commemorative works as symbols of heritage, not hate, believe they should, at all costs, stay. Those who feel any manifestations of Confederate iconography are nothing more than leftover symbols of white supremacy argue that they should be removed immediately.

There is, however, a third option.

CATALOG HISTORICAL INTEGRITY

The National Park Service should commit to conducting an immediate inventory and assessment of the Confederate commemorative works it manages. No such inventory currently exists. Upon completion of the inventory, NPS historians and interpreters, working collaboratively with outside partners, would assess every Confederate monument, statue, and plaque and offer recommendations regarding its suitability as an educational resource.

Confederate commemorative works found to accurately contribute to public understanding of the American Civil War would remain, perhaps with enhanced interpretive signage to provide additional historic context. Those monuments, statues, and plaques found to lack historic integrity through flaws in design, placement, or because their descriptions of people, events, and the social, economic, and political causes of the war mischaracterize our history, would be subject to redesign, relocation, or removal. The implementation of an NPS inventory and assessment of Confederate commemorative works would place the agency in charge of determining the future of its resources (NPS has been hiding from this issue for far too long!) and reassure the public that the fate of Confederate monuments, statues, and plaques was being considered in a rational manner.

Those who object to any process that might result in the removal of Confederate commemorative works from NPS-managed landscapes would do well to consider the following: These works were designed, emplaced, and dedicated during an extended period of heightened racial violence, intense racial segregation, and the near complete disfranchisement of African Americans from electoral, political, and economic power. The discredited Lost Cause mythology spawned a corrupted view of the root causes of the Civil War and supported an abundance of racist stereotypes (think “Birth of a Nation” and “Gone With the Wind”) about black people that bore horrible consequences.

Jim Crow, lynching, separate and unequal education, and rank inequality before the

“Jim Crow, lynching, separate and unequal education, and rank inequality before the law, are contextual cousins of every Confederate monument in the United States.”

— Alan Spears, National Parks Conservation Association

law, are the contextual cousins of every Confederate monument in the United States. Even in its most benign form this is heritage with blood on its hands.

Still, the potential exists through deliberate action to create solutions to this challenge that support a more honest rendering of American history without disappearing problematic commemorative works. Our national parks should be places that help the public to embrace the complexity of the American experience, wonder, warts, and all. Confederate commemorative works, at least those determined not to be patently offensive and inaccurate, have a role to play in helping us to better understand not just the military history of the Civil War, but the racial and racist overtones that dominated the post-war process of reconciliation and remembrance.

At Gettysburg National Military Park, a marker for the 11th Mississippi Infantry Regiment sits next to the white house and barn of Abraham Brian, a free African American. The two stories are inextricably linked; the Confederate forces that came within yards of breaking through the Union lines during Pickett’s Charge and the black family that fled at their approach fearing they would be captured and sent south into slavery.

Removing that marker would do nothing to right ongoing, systemic injustice or correct long-standing historic wrongs. Instead, let’s do the hard work of embracing our whole history and use all the resources at our disposal to tell a fuller, more honest, and just version of the American experience.

— Alan Spears
National Parks Conservation Association

100 Life Century Club

Life members who contribute \$125 to ANPR are recognized in the Second Century Club. Once you are a Second Century Club member, each additional \$250 donation will increase your life level by one century. If you are a life member, please consider raising your contribution to the next level.

2nd Century Club

- Paul Anderson
- Lawrence Belli
- Tony Bonanno
- Ramon Brende
- Paul Broyles
- Rod Broyles
- David Buccello
- Patricia Buccello
- Robert Butterfield
- Michael Caldwell
- William Carroll
- Bruce Collins
- Roberta D’Amico
- Joe Evans
- Mitch Fong
- Diane Garcia
- Erv Gasser
- Hal Grovert
- Fred Harmon
- Cheryl Hess
- James Hummel
- Scott Isaacson
- Craig Johnson
- Margaret Johnston
- Dick Knowlen
- Ron Konklin
- Mary Kimmitt Laxton
- Tomie Patrick Lee
- Joni Mae Makuaane-Jarrell
- John Mangimeli
- Colleen Mastrangelo
- Larry May
- Sean McGuinness
- Jack Morehead
- Jeff Mow
- Jim Northup
- Aniceto Olais
- Olav Olsen
- Tim Oliverius
- Cindy Ott-Jones
- Jon Paynter
- Bundy Phillips
- Bill Pierce
- Cindy Purcell
- Tom Richter
- Bruce Rodgers
- Ed Rothfuss
- Cordell Roy

- Bill Sanders
- Elizabeth Schaff
- Tim Setnicka
- Margaret Steigerwald
- Bryan Swift
- Mark Tanaka-Sanders
- Dale & Judy Thompson
- Victor Vieira
- Karen Wade
- Ben Walsh
- Philip Ward
- Janice Wobbenhorst
- Tom Workman

3rd Century Club

- Jim Brady
- Erin Broadbent
- Carl Christensen
- Kathleen Clossin
- Bruce Edmonston
- Maureen Finnerty
- Larry Henderson
- Steve Holder
- Keith Hoofnagle
- Stephen M. Hurd
- Lisa Klinger
- Bob Krumenaker
- Dave Lattimore
- Dan Moses
- Melinda Moses
- Alden Nash
- Martin O’Toole
- Mike Pflaum
- William Quinn
- Teresa Shirakawa
- Ron Sprinkle
- Kathy Williams
- Phil Young

4th Century Club

- Warren Bielenberg
- Cliff Chetwin
- Mark & Phyllis Harvey
- Mary Jeff Karraker
- Deborah Liggett
- Jay Liggett
- Scot McElveen
- Jean Rodeck
- Rick Smith

- Barry Sullivan
- Nancy Wizner

5th Century Club

- Karen Gatewood
- Dr. Russell Clay Harvey
- Robert Huggins
- Michael Lynch
- Bruce & Georjean McKeeman
- David Roberts
- Don Steiner

6th Century Club

- Vaughn Baker
- Rebecca Harriett
- Warren Hill
- Rick Mossman

7th Century Club

- Dennis Burnett & Ginny Rousseau
- Butch Farabee
- Gary Hartley
- Jonathan Lewis
- Gilbert Soper

9th Century Club

- Scott Pfeninger

10th Century Club

- Stacy Allen
- Rick Erisman
- John Townsend
- Gary Warshefski

11th Century Club

- Edward Rizzotto
- Deanne Adams & Tony Sisto

12th Century Club

- Dick Martin

15th Century Club

- Don Chase

23rd Century Club

- Wendy Lauritzen

25th Century Club

- Bill Wade



**ASSOCIATION OF
NATIONAL PARK RANGERS**

P.O. Box 151432 | Alexandria, VA 22315-9998

**FIND YOUR
ANPR**

Directory of ANPR Board Members, Task Group Leaders & Staff

BOARD OF DIRECTORS

President

Paul Anderson, Retired
panderson@anpr.org

Past-President

Jan Lemons, Wolf Trap
jlemons@anpr.org

Secretary

Lauren Kopplin, Dinosaur
lkopplin@anpr.org

Treasurer

Bill Wade, Retired
bwade@anpr.org

Education and Training

Tom Banks, Olympic College
tbanks@anpr.org

Fundraising Activities

Jeanette Meleen, William Howard Taft
jmeleen@anpr.org

Internal Communications

Elsa Hansen, Southeast Utah Group
ehansen@anpr.org

Membership Services

Reghan Tank
rtank@anpr.org

Professional Issues

Tim Moore, National Mall
tmoore@anpr.org

Seasonal Perspectives

Lauren DeGennaro, Mississippi
ldegennaro@anpr.org

Government Affairs

Rebecca Harriett, Retired
rharriett@anpr.org

Strategic Planning

Jonathan Shafer, National Capital Region
jshafer@anpr.org

BUSINESS OPERATIONS

Business Manager

Chris Reinhardt
P.O. Box 151432
Alexandria, VA 22315-9998
creinhardt@anpr.org

Ranger Editor/Publisher

Melissa DeVaughn
(907) 240-7726
mdevaughn@anpr.org

**Give
the gift of
membership**

**FOR MORE INFORMATION
VISIT ANPR.ORG**