

# Profile

COURTESY OF JON JARVIS



Director Jarvis enjoys a hike in Yosemite National Park, California.

# A conversation with NPS Director Jonathan B. Jarvis

By Wade M. Vagias, guest editor

*With a career spanning more than three decades, much of it dealing with wilderness, National Park Service (NPS) Director Jon Jarvis is in a special position to offer his perspective on wilderness stewardship and science. On 1 April 2011 I discussed with Jon the challenges and issues faced by NPS wilderness managers and the interface of science with stewardship of wilderness resources.*

## Relevance of wilderness

**Wade Vagias (WV):** Enhancing park relevancy is a goal you cite frequently. Why should wilderness matter to society, NPS employees, and the National Park Service?

**Jon Jarvis (JJ):** Wilderness, to the majority of the American public, is more of an idea than a real thing. Most Americans are not going to experience wilderness in the way our [NPS] rank and file do. Nevertheless, I know that if the American public did not care about wilderness and wild places, we would have never set aside half of Alaska, including the Arctic National Wildlife Refuge, and places like the Grand Canyon and Yellowstone. Abraham Lincoln would

not have set aside Yosemite during the Civil War if we as a society didn't place deep core values on wild places. Wilderness evokes a passion among people; they take comfort in knowing there are places intentionally left wild: "Someday I might actually get to see that, or maybe not, but I just like to know it exists. Even though I will probably never see a panther or a wolf or a grizzly bear, it's cool to know that they exist and that their habitat is protected." Wilderness, in some ways, represents this broader American ethos—that we as a society have decided to retain a piece of that wildness, even if it has meant imposing constraints on our desire to dominate everything. For employees of the National Park Service, wilderness is the

touchstone, the standard, by which we measure our success in preserving these places and their ecological systems for future generations.

## Climate change

**WV:** One of the most significant issues facing protected area managers is climate change. We are witnessing mass tree mortalities, upslope migration of species, and perennial streams becoming seasonal, among many other changes. What role(s) do you envision wilderness playing in regard to climate change?

**JJ:** As I've said publicly and before Congress, climate change is the biggest threat we have ever faced in terms of integrity of the National Park System.

In many ways, wilderness is at the center of the issue because what we have assumed to be natural systems, and the actions we take to protect them such as controlling exotics and restoring native species, are being turned on their head. We are finding mercury in high-elevation lakes; nitrogen is coming over from coal-fired power plants of China. I was in the Virgin Islands a couple weeks ago and the park staff said, “Oh, the Sahara dust is up today.” Imagine, dust from the Sahara Desert travels across the Atlantic and impacts the Virgin Islands! We are beginning to realize how interconnected the world’s systems are and that they are affecting wilderness—often in pronounced ways. That means a couple things. To a certain degree, we’re going to have to be more active in managing these systems. We’ve been active in terms of restoration and passive in everything else. We’re going to have to begin to manage wilderness for standards of resilience because some species are going to be pushed over the edge.

We have managed parks and wilderness as islands, and if there is a silver lining to climate change, it is that it is forcing us to think at the landscape scale. Connectivity, redundancy, and resilience are coming into play, and in a way that goes beyond just the National Park Service to include our partners with Fish and Wildlife, Forest Service, Bureau of Land Management, state agencies, and that’s a good thing. But to

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address the challenges created by climate change will force us to rethink some of our foundational beliefs, the actual premises upon which we have managed for a long time.

### **Restoration**

**WV:** Is active manipulation—restoration—ever justifiable in designated wilderness, and if so, is there an example you would cite?

**JJ:** I don’t necessarily subscribe to the notion that wilderness management is hands-off. I have been managing wilderness for most of my career and it’s practically a myth that you cannot *not* manage wilderness. Today within designated wilderness, we are managing the public, exotic species, fire, cultural resources, and science, all of which are included in the Wilderness Act. Now we are adding a new element: restoration. I keep going back to the term “resilience” and our need to look at wilderness in the landscape-scale context and the recognition that we may be managing a species that might be forced to migrate. Wilderness will lose its value if it’s fake and various pieces have moved on or become extinct.

What if something new moves in, driven by climate change? How do we treat that? If javelinas show up in Washington State because of climate change, are they exotics? We need to be aware that anthropogenic changes are occurring in wilderness that we must face head on.

### **Valuation of natural resources**

**WV:** Affixing a dollar figure to ecosystems and the services they provide can be contentious, yet events like the breaching of Grand Ditch in Rocky Mountain National Park and the *Deepwater Horizon* oil spill necessitate our ability to do so. How should we best frame the question “what is a wilderness worth?”

**JJ:** We should not be so naive to think that we can justify wilderness on either straight moral values or straight economics. We must use both. We’ve been relatively articulate on the moral value side and relatively inarticulate on the economic value side. Wilderness protection only exists by the will of the people. Thus we must advance our ability to quantify and describe the values of

wilderness. There are other areas, too, that need to be explored. One is the evidence that the economy of a community in close proximity to wilderness is more resilient to economic downturns than the economy of a similar community not in close proximity to a wilderness. One of my favorite quotes by Luther Propst of the Sonoran Institute is “Whoever makes the economic argument first, wins.” We always have to be prepared to make an economic value argument.

### **Cultural resources**

**WV:** Management of cultural resources in wilderness is at times contentious, yet humans have been using and manipulating the landscape for millennia, including areas that are now designated wilderness. What challenges come to your mind with managing cultural resources in wilderness? How can the National Park Service be better stewards of both wilderness and cultural resources in wilderness?

**JJ:** In the National Park Service, I don’t think we necessarily see as much of a conflict between cultural resources and wilderness as certain constitu-



NPS/DAN KIMBALL

Director Jarvis (right) joins Superintendent Dan Kimball on a "slough slog" in Everglades National Park, Florida.

ency groups who don't believe cultural resources should remain or be of value in wilderness. Internally, there is an understanding that they [wilderness and cultural resources] both are valued.

### *Technology*

**WV:** Technology is fundamentally changing society. What concerns do you have about emerging technologies' influence on wilderness? Are there new or emerging technologies that will enhance our ability to be effective wilderness stewards?

**JJ:** At the [2011] George Wright conference somebody asked a question about the use of technology in the outdoors and I just said, "Get over it." I think it's an incredible waste of time to argue about technology in the outdoors. Are we still hiking in wool with hand-woven wicker packs? No. Look at the technology in a modern backpack: carbon fiber, Gore-Tex, ripstop nylon. But then we

say, "Don't take your BlackBerry." I don't understand why we've singled out that particular aspect of technology and labeled it "bad." I believe a lot of it is driven by age, which is interesting because as we backpackers get older we like our comfort technology—the super-high-density foam bed so our bones don't poke through into the ground. But we rail against the handheld technological devices like GPS and a data link that could be of extraordinary value in a rescue, or even for knowledge about a particular place where you are.

During the America's Great Outdoors listening sessions we held around the country, the adult sentiment was "They [young people] need to take the wilderness like I got it. Leave that technology at home." And when we did the listening sessions with young people [24 or under], we heard: "I'm bringing it with me. What I want is high-speed Internet and high-speed wireless access in the backcountry so that I can share this experience with my Facebook friends." Those young people are going to be running the show soon. It's not like we're going to have a choice. What we need to be focusing on is developing the kind of applications that are useful, that deepen the wilderness experience, not detract from it. With young people today, it's about accessing information. It's all about "At any given moment, I can access information to get the answer I need." If I'm out in the woods

and see a mushroom that I am interested in eating, I would love to be able to take a picture of it and within 30 seconds know whether I can eat it or not [laughter]. Like I said, technology is here to stay; "get over it."

### *International coordination*

**WV:** Landscape-scale protection of resources often requires coordination across political borders. Last November at WILD 9—the international wilderness and biodiversity conference—in Mérida, Mexico, you signed a trilateral memorandum of understanding (MOU) with Canada and Mexico for wilderness conservation. What opportunities do you envision regarding international efforts to promote landscape-scale protection? And is there anything specific regarding the WILD 9 MOU we should look for?

**JJ:** Perhaps the most concrete example we are working on is reopening the Rio Grande crossing from Big Bend National Park to Boquillas del Carmen in Mexico. Secretary Salazar is in Mexico this week meeting with the Mexican Secretary of Environment with the goal of enhancing the relationship between the national parks on both sides of the border and reopening the crossing at Boquillas. It will not be like it was in the old days when you climbed down the bank, got in a boat, went over, and got your burrito and Tecate. Now you're going to show your passport,

go through security, climb down the bank, get in the boat, go over, and get your burrito and Tecate [laughter]. It will be a little different, but the symbolism of being able to reopen that connection between Mexico and the United States is huge. It not only reaffirms our relationship with Mexico but also sets a new framework for this relationship.

I believe these cross-border relationships around wilderness or other protected areas are a game changer for us. We have a long history of collaboration with Canada, particularly at Waterton-Glacier [International Peace Park]. And while we do have a very contentious border with Mexico, the trilateral MOU gives us a new and positive framework for moving forward. I believe, as we've been working with Landscape Conservation Cooperatives, that a boundary is nothing more than a line on a map.

### **Role of science**

**WV:** As noted in the 1964 Wilderness Act, wilderness has multiple values, including scientific inquiry. What suggestions do you have for managers who are trying to balance science in wilderness?

**JJ:** When I was superintendent of Wrangell-St. Elias National Park and Preserve (Alaska), a group of scientists wanted to run a series of dynamite charges across the Bagley Icefield. Doing so would give them a fairly accurate measurement of the thickness of the ice. They

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produced a legitimate proposal but I denied it. They could not believe that I denied it and I said, "That's designated wilderness and you're going to go out there and set off dynamite on the surface of the glacier?" And they said, "Well, there's no one out there." I said, "Well you don't really know that. And if there is, their expectation of wilderness experience is absolutely the highest priority. There could be somebody out there cross-country skiing across the icefield and then you go out there and set off dynamite—you have totally ruined that person's experience." The information to be derived from that research versus its impact wasn't justified in my mind. This was before climate change was really gnawing at us.

There are ways that science can take place in wilderness, and we have to educate the scientists on what wilderness is and appropriate ways to conduct science in wilderness. Proposals for scientific activity in wilderness must be done in such a manner that it maintains and does not impair wilderness character and must be run through a minimum requirement analysis. In fact, wilderness policy encour-

ages us to work with emerging technologies to develop the least intrusive forms of instrumentation and research to both advance our understanding of natural systems and to minimize impacts. Most parks that manage wilderness have the policies in place, and we've used them over and over to identify the impacts to wilderness character and to the visitors' expectations.

### **Future of wilderness**

**WV:** In three years we will celebrate the 50th anniversary of the Wilderness Act. What do you see as the most significant challenges for wilderness stewardship in the next 50 years, and what advice would you give to wilderness managers to help them meet those challenges?

**JJ:** The biggest challenge is getting a whole new constituency to experience wilderness. It's one thing to appreciate the concept of wilderness, but it's a whole different thing to sleep in the high country of the Sierras under the stars, or take a paddle trip in the Everglades. We've seen it with young people over and over: wilderness can be life-changing in some sort of chemical,

magical way. We don't have enough programs to get kids out into that experience. We as an institution must be willing to put energy into making it happen. We have a culture of "build it and those who want to come will come," and we need to change that mind-set. Connecting a new generation is critical to another 50 years of the Wilderness Act and 100 years of NPS stewardship. We have to bring them to the resource and then bring them back again. Regardless of ethnicity or socioeconomic background, wilderness can have the same effect, the same impact on lives. It is up to us to provide opportunities to youth to experience wilderness. It will take an aggressive effort, but the stakes are too high. The 50th anniversary is a great event to celebrate our successes, but we cannot rest on those achievements alone and assume that what we did for the last 50 years is going to work for the next 50.