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Wilderness is a lasting legacy, a gift from our forebears that we can explore, enjoy, and celebrate before we pass it along to our offspring. In this volume, we aspire to express some inkling of the vast and magnificent nature of wilderness, some overview of the historical achievements that led from idea to action to permanent protection, some insight into the workings of a natural order where the handiwork of humankind is light, or even invisible.

Wilderness, a creation of the boundless collaboration of natural systems, is a merger that we can study, make conclusions about, and debate, perhaps – we hope – for perpetuity. Wilderness is also an undeniable element of our heritage, a force that tested us as pioneers and, today, as Americans who connect to wilderness for the challenges it presents for recreation and for the comfort it gives to the spiritual. The pages before you express a vastness of thoughtful viewpoints and observations, descriptions that pale in the face of the wild beauty that is out there to be experienced in wilderness lands. So read on, but then go, and see for yourself the magnificent measure of purity that has all wilderness fans so excited.

In wilderness, we find the pure, unvarnished, natural lands that have yet to be tamed or subjugated or bent to the will of modern humankind. Some will say that in wilderness there is no mediocrity to be found. How could such a thing exist in wilderness? Here, the natural beauty of America shines through. Whether this points to the divine hand of a higher power, or simply to the raw perfection of the natural world, as visitors to these sacred spaces we can appreciate how tiny and insignificant we are in the face of such raw majesty.

When venturing into wilderness, without the mechanized and motorized aids to provide an artificial separation from nature, we experience the “split rail value” that Aldo Leopold extolled so eloquently. Here, we can test our individual skill and endurance in much the same way and with much the same tools as the earliest explorers – both EuroAmerican and indigenous – and find that our abilities have not atrophied so far that we cannot survive, thrive, and even excel in a world where humans are not the dominant force.

These are landscapes sculpted by natural forces as timeless as they are powerful. Other creatures may perch atop the food chain here, allowing us a momentary recognition that we are perhaps not everywhere the pinnacle of evolution. Here, we slip back into our original place in the natural order, part of a complex web of life in which we are active participants, not idle spectators. This is our native habitat.

Today, we celebrate the first half-century of American wilderness, a truly revolutionary concept that places the preservation of natural and unaltered places, be they mountains or deserts or grasslands or wetlands, as the highest and best use of the land, providing the greatest value to all of humankind. On that day in 1964 when the Wilderness Act became law, the leaders of our nation, spurred on by fierce advocates for the natural world, showed such wisdom and foresight that they invented a whole new way of looking at the wilds: not as a wasteland to be feared and conquered, but as a wonderland to be treasured and protected. It was an experiment so wildly successful that it has been emulated all over the world.

We owe these wilderness leaders a deep debt of gratitude, which each of us can repay through an abiding stewardship for this wilderness inheritance and a cultivation of new wilderness lands to be identified and protected in the years to come.

Erik Molvar
Sagebrush Sea Campaign Director, WildEarth Guardians
Wilderness50 Contributing Editor

Jan Nesset
Former wilderness ranger and imperishable wilderness enthusiast, Wilderness50 Contributing Editor
THANKS TO THE NATIONAL WILDERNESS PRESERVATION SYSTEM FOR 50 YEARS OF WORKING ON BEHALF OF ALL KINDS OF WILD CREATURES

Johnson & Johnson
Cover photos (clockwise from top):

- Capitol Peak, Maroon Bells-Snowmass Wilderness, Colo. Photo by Nate Zeman
- President Lyndon B. Johnson signs the Wilderness Act on Sept. 3, 1964. Photo courtesy of wilderness.net
- A coyote, Canis latrans, in the Rocky Mountain National Park Wilderness, Colo. Photo by Fi Rust
- Preservationist Bob Marshall, an early champion of wilderness. Photo courtesy of wilderness.net
- A cypress swamp in the Marjory Stoneman Douglas Wilderness, Fla. Photo by Bill Lea
- Howard Zahniser, principal architect of the Wilderness Act. Photo courtesy of wilderness.net
on nature's terms

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COMMEMORATING THE 50TH ANNIVERSARY OF THE WILDERNESS ACT

Touring the U.S. at these museums:
January 17 – May 26, 2014 / WILDLING MUSEUM, Solvang, CA
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December 14, 2014 – March 8, 2015 / EVANSVILLE MUSEUM OF ARTS, HISTORY & SCIENCE, Evansville, IN

Exhibition catalogue with essay by Annelies Mondi, Deputy Director of the Georgia Museum of Art; special note from Jamie Williams, President of the Wilderness Society; 40-pages; 49 illustrations. Available online from EyefulPress.com and ThomasPaquette.com.

Westward, 24 x 30 inches, oil on linen, 2013. Theodore Roosevelt Wilderness, North Dakota.
PEOPLE SAVING WILDERNESS ... FOR PEOPLE

BY DOUG SCOTT

Americans are in a love affair with nature in all its moods and green raiment. We throng national parks. We never tire of seeing wildlife. Our kids take to nature naturally.

With the establishment of Yellowstone in 1872, America gave birth to the idea of national parks. We pioneered protecting wilderness areas with passage of the Wilderness Act of 1964. People around the world look to our Wilderness Act as the Magna Carta for wild places as they shape their own nature protection programs.

Wilderness Designation: An Extra Layer of Nature Protection

Wilderness areas are the most natural portions of our national parks, national forests, and other federal lands. We give them the strongest possible protection – in laws passed by Congress. Each law establishing a new wilderness refers to a map with a precise boundary, making it part of the law. Once enacted, only Congress can alter the boundaries or protections. That means anyone who lusts to exploit resources within the area confronts a steep burden of proof to convince Congress to move the boundaries, even by a seemingly trivial amount.

The Wilderness Act sets out the criteria: an area generally appears “to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable.” It should have “outstanding opportunities for solitude or a primitive and unconfined type of recreation.” It should “be at least five thousand acres of land or ... of sufficient size as to make practicable its preservation and use in an unimpaired condition” – more than 70 of our wilderness areas are smaller. Congress applies these notions in a subjective way, responding to the desires of constituents. I love the more lyrical “ideal” definition also in the act: “A wilderness, in contrast with those areas where man and his own works dominate the landscape, is ... as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.” Untrammeled means unrestrained; in these areas we choose to restrain our usual tendency to tinker, so that the forces of nature may unfold as they will.

Since President Lyndon B. Johnson signed the Wilderness Act on Sept. 3, 1964, every president has signed laws designating additional wilderness areas. Our National Wilderness Preservation System now embraces more than 109.5 million acres – nearly 5 percent of the landmass of our country.

President Lyndon B. Johnson, seated at right, signs the Wilderness Act on Sept. 3, 1964.

Montana’s Bob Marshall Wilderness Complex was named in honor of Bob Marshall, a wilderness advocate who, in the 1930s, helped establish the first 14 million acres of wilderness by administrative policy.
The Ansel Adams Gallery would like to commend the American people for having the strength and foresight to protect Wilderness untrammeled for the inspiration and enjoyment of future generations.

EMAIL: info@anseladams.com
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WEB: www.anseladams.com
Congress Does Not Save Wilderness. People Do.

Behind our wilderness areas are stories of people who love a nearby wild place and roll up their sleeves to get it protected. They enlist friends, small business owners, teachers and students, and local officials to lend a hand. They work with the administering agency to map the area and ideal boundaries and document its wild values to prepare a solid proposal. This is what motivates members of their congressional delegations to get the laws passed. The stories of these everyday citizens are as diverse as the areas they have saved.

Marge Sill in Reno worked to protect some of the first wilderness areas in Nevada; Jose Witt carries on that work now from Las Vegas, with Marge as mentor. Donna Osseward continues her father’s work to protect the wilderness in Washington Olympic National Park. Liz Howell is the grandmother of wilderness protection in Wyoming – a difficult state for wilderness these days, but she’s taught everyone to persist in an ever-polite way. Daniel Yetter was a quiet force behind New Hampshire’s Wild River Wilderness Area, his favorite area to lead hikes. Retired marketing expert Phil Hough leads the world-class grassroots campaign for the Scotchman Peaks Wilderness along the Montana/Idaho panhandle border, working with young people from nearby schools and colleges, including in a series of “Community Kids Hikes” for kids aged 3 to 17 who are at risk and/or come from low-income families.

The Wilderness Act prohibits all things mechanical and motorized, including chainsaws, on wilderness lands. Bill Hodge founded Southern Appalachian Wilderness Stewards to maintain sections of the Appalachian Trail in North Carolina and Tennessee using crosscut saws. He has Brenna Irrer and many others to help. These and other wilderness advocates will tell you that there were many others who give as much to the effort.

This is American grassroots democracy at its finest. It is a compelling answer to the cynicism about our national politics that is rampant in our culture and fed by our media. I know of nothing more corrosive to the hopes for our future – and particularly the participation of young people – than this cynicism about our politics and our politicians. Here are some of the stories of people saving wilderness – for people.

Great Swamp Wilderness, New Jersey

This 3,700-acre gem is the heart of the Great Swamp National Wildlife Refuge 26 miles from Times Square. In the early 1960s, classic grassroots organizing by housewife Helen Fenske mobilized neighbors to block plans to fill the swamp for a third New York City airport. They raised the funds to buy the initial land and donate it to the government for a wildlife refuge, then turned to securing it with the extra layer of protection afforded to wilderness areas.

As Congress was working on this wilderness legislation in 1968, a low-standard road bisected the area. Congress directed the road be removed. It is now a pleasant walking and horseback riding trail. Plugging an old pre-Revolutionary War drainage ditch raised the water to a more natural level, rejuvenating the swamp with vibrant green lily pads that set the hearts of frogs singing. Thank you, Helen!
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San Jacinto State/Federal Wilderness, California

Several states have wilderness laws modeled on the federal law. California’s wilderness law protects most of the Mount San Jacinto State Park high on the mountain above Palm Springs. The 9,800-acre state wilderness area, reached by gondola, is bracketed by the north and south units of the 32,248-acre federal San Jacinto Wilderness. The combined 40,000-acre state/federal wilderness complex protects several miles of the Pacific Crest Trail.

Gates of the Arctic National Park and Noatak National Preserve Wilderness, Alaska

My wife and I met as lobbyists working to protect vast expanses of Alaska in the late 1970s. We honeymooned on a monthlong, 330-mile canoe trip down the Noatak River from the Gates of the Arctic through the Noatak National Preserve – the two total more than 12.9 million acres – to the Bering Sea.

In the “Great Land,” we were soon aware that we were no longer at the top of the food chain. The grizzlies are in charge there. The land was hushed, the Milky Way a spectacle beyond anything urban folk, submerged in light pollution, can imagine, the aurora borealis a shimmering mirage of other-worldly light.


When President Jimmy Carter lifted his pen from new law on Dec. 2, 1980, our national park, national wildlife refuge, and wilderness systems had doubled in size. Like most wilderness Congress has protected, this was a bipartisan achievement, the result of the largest grassroots conservation campaign in history. All of us involved – the hundreds of thousands of citizens, the members of Congress, and Carter – were swept up in the vision of doing it right for once: protecting vast areas in boundaries embracing entire ecosystems and watersheds. As our motto stated, it was “The Last Great Chance to Do It Right.”
Wee Thump Joshua Tree Wilderness, Nevada

Nevada has 67 wilderness areas, many large expanses of stunning desert, but a particular gem is the 6,489-acre Wee Thump Joshua Tree Wilderness administered by the Bureau of Land Management. The special quality of this area is an expanse of old-growth Joshua trees (in the Paiute language, “Wee Thump” means “ancient ones”). They grow about a half-inch per year. Many here may be more than 900 years old.

Silence is common across these gentle slopes; visitors can lose themselves among the ancient ones for what the Wilderness Act calls “outstanding opportunities for solitude.”

Bob Marshall Wilderness Complex, Montana

Bob Marshall was a U.S. Forest Service official and “the most effective weapon for wilderness preservation” in the 1930s, the key player in establishing our first 14 million acres of wilderness by administrative policy. When he died at age 38, his colleagues named this million-acre wilderness west of Great Falls for him. It was further protected in the Wilderness Act itself. Congress has subsequently established the Great Bear and Scapegoat wilderness areas, which combine with “The Bob” in a 1.5-million-acre mountain fortress. The eastern flank is the last undeveloped place where the plains come right to the foot of the escarpment of the Rockies – Boulder without Boulder.

Lewis and Clark encountered grizzlies near what is now Bismarck, N.D., in 1805, but we have chased the last of this plains species into the mountains. Karl Rappold, a Montana rancher, considers the bears that venture down the willow draws onto his spread to be almost family. Lynx, mountain goats, and wolverine find refuge in this magnificent wilderness, too – and so can you.

The Bob Marshall Wilderness Complex totals approximately 1.5 million acres and is the third-largest wilderness area in the contiguous United States.
Ansel Adams (Emigrant) Wilderness, California

I want to climb out the window every time I fly over the High Sierras. This is superb trail country for backpackers and horseback riders, including those tackling the 2,650-mile motor- and bicycle-free Pacific Crest Trail from Mexico to Canada. It is a steep climb, but once on top, the Sierra crest sweeps away north and south, a geologic Bayeux Tapestry revealing the story of tens of thousands of years of mountain building and the imponderably slow power of ice and water to level the mountains again.

Here, just south of Yosemite National Park, there were plans to build a road across a mountain pass in the gap between the small Minarets Wilderness and Yosemite National Park. However, then-Gov. Ronald Reagan had appointed a former Sierra horse packer as his secretary of resources and he had different ideas. In the summer of 1972, the governor led a large press corps with 100 horses for a trail ride and campout. The next day, Reagan – literally in a white hat – announced he had persuaded the Nixon administration not to build the road. And he pushed Congress to seal the pass by expanding the small Minarets Wilderness to the Yosemite boundary. The name was changed to honor Ansel Adams in 1984.

Diverse stories. Diverse wilderness areas. What story will you and your friends add to this proud ledger?

Doug Scott is a retired lobbyist who, for more than 40 years, worked to persuade Congress to protect more wilderness areas. He is the author of The Enduring Wilderness: Protecting Our Natural Heritage through the Wilderness Act (2004) and Wild Thoughts: A Selection of Great Writing about Nature, Wilderness, and the People Who Love Them (forthcoming).
I was only 8 years old when President Lyndon B. Johnson signed into law the Wilderness Act of 1964, designating the nation’s first 9 million acres of the wilderness preservation system. As an inner-city kid, wilderness for me was a vacant lot where we played stick ball games and launched bottle rockets on the 4th of July. Fifty years later, I am celebrating the more than tenfold increase in the wilderness preservation system that has now spanned my lifetime. My career as a conservation scientist has allowed me to focus on the importance of lands with wilderness character as I have been making the case for why we need even more of them protected now than when I was a child.

In its infinite wisdom back then, Congress defined wilderness as an area that “(1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4)
may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

The Wilderness Act preserved a slice of our natural history, and, in doing so, connected us to the powerful forces of nature that shape life on this planet. We need these areas because very few places outside them are large enough or remote enough to support fully functional natural processes – also known as ecosystem processes. Nature’s processes include predators in pursuit of prey, tiny organisms recycling soil nutrients, pollination by birds and bats, mass wildlife migrations, large natural disturbances such as fires and floods, and unimpeded stream flow. In short, this is what puts the wild in wilderness.

Apex carnivores like wolves, bears, and wolverines find sanctuary in large wilderness areas, free to roam about without poaching, off-road vehicle intrusions, chainsaws, and cities in the way. Large wild areas also act as “strongholds” for aquatic species, especially trout and salmon, that find refuge in them. Rivers running through wild areas, if they are large enough to encompass entire watersheds, like many in Alaska, allow fish to migrate from ocean to spawning grounds and back again without bumping into dams, cow-damaged stream banks, polluted waterways, and clearcut hillsides. And large wild areas buffer native plants from invading weeds that otherwise disperse along roads and out-compete the natives.

This year, we celebrate some of the most spectacular wilderness areas in the world. The crowning jewels of our nation’s public lands represent less than 2 percent (more than 109 million acres) of the total land base, but are some of the most important areas we have left. Wilderness is concentrated in the Pacific Northwest, Alaska, the Rockies, and portions of the Southwest where large areas (at a landscape scale) support natural disturbances unimpeded by humanity. It is in these areas that we best observe natural processes at work, wildlife and wildlands in a natural state, as they have existed for millennia. Smaller wilderness areas in the eastern and central United States are also important as building blocks for re-wilding landscapes.

Are There Really Any “Naturally” Wild Places in the World?

Because humanity’s ecological footprint can be detected just about anywhere on the globe, including concentrations of toxic chemicals in polar regions, some have argued that wilderness is no more than a construct of the human imagination. After all, even pre-European-contact American Indians roamed all over, as argued.

Our ancestral primates evolved out of Africa millions of years ago when everything was wilderness. And while it is certainly true that since then aboriginal peoples have manipulated natural processes like fire and occupied many of today’s wilderness areas, our industrial footprint has grown exponentially, making wilderness essential to our long-term survival whether it is a construct or not.

We “created” wilderness unintentionally because of the sea of humanity outside wild areas. We need these areas to understand where we came from and how the forces of nature and humanity work in concert or in opposition in shaping the web of life.

Today’s humans have become an agent of change on a planetary scale, altering processes and degrading biodiversity. The way we disturb ecosystems is very different from how nature does, as seen in comparisons of wilderness areas with their surroundings. In general, native species and ecosystems are resilient to the disturbances brought about by nature while human-generated disturbances are more frequent, intense, and occur over much larger areas than what the majority of native species evolved under. Wilderness provides us with a glimpse of unimpeded natural processes so we can better understand and mitigate our effect on the planet.

Fire in Kalmiopsis!

Designated by Congress in 1964, and now totaling nearly 180,000 acres, the Kalmiopsis Wilderness is located in the Klamath Mountains of southwest Oregon, pressed up against the California border. It includes remote canyons, emerald-colored rivers, and unusual serpentine bedrock geology uplifted some 150 million years ago from an ancient seabed when continental plates collided and dinosaurs roamed. Fire has shaped the kaleidoscope of plant communities in this region, which includes mixed evergreen forests rich in bird life, red-rock pine-savannahs exceptionally rich in plants, California chaparral, old-growth forests, and wetlands such as Darlingtonia fens – named after the carnivorous cobra...
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Howling for the Tongass Rainforest

In the late 1990s, I got my chance to explore Alaska’s wilderness as a research scientist on the Tongass rainforest, one of the last remaining intact temperate rainforests in the world. The Tongass is scattered across thousands of islands, each one bisected by streams where a visitor can still walk across the backs of salmon lined up like rush hour traffic as the fish make their way to spawning areas. In fact, salmon are so abundant that wolves feed on them, bears thrive on them, and the largest population of bald eagles in the world gorges on spawned out carcasses, and those carcasses, in turn, are cycled back into the rainforest as nutrients taken up by streamside vegetation.

Every morning, I would awake before the crack of dawn – around 3 a.m. during the Alaska summer – to start bird surveys in old-growth forests and in the surrounding clearcuts. Once inside the wild forest, the sounds of humanity vanished and nature’s processes ruled. I witnessed this on my study plots as well as on the South Prince of Wales Wilderness Area, 90,968 acres of pristine Tongass rainforest.

Following a compass line to bird survey stations that were marked by white PVC poles with brightly colored flagging...
Happy Birthday to Us.
Happy Birthday to Us.
Happy Birthday Dear Wilderness Act.
Happy Birthday to Us.
We Need Wilderness As Climate Change Insurance

Climate is a top down process that governs the distribution of plants and wildlife all over the globe, influences natural disturbances like fires and floods, and determines stream runoff via snow melt from the mountains, among other factors. With climate change, extreme weather events are increasingly the new norm. Globally, we are in the midst of a biodiversity crisis due to a double-whammy of unprecedented human-caused disturbances and climate chaos.

Because many wilderness areas span elevation and latitudinal gradients uninterrupted by roads, towns, and clearcuts, they may act as climatic refugia for wildlife dispersing in search of more suitable microclimates. Their remoteness fosters resilience to climate-related disturbances and enables plants and wildlife to adapt more readily to climate change in a stress-free environment. Wilderness areas that encompass full watersheds and those at higher elevations also provide intact hydrological processes and, because they lack instream barriers like dams and irrigation canals, provide fish with the best chance of finding cold-water refugia.

Conclusions

My daughter is now about the same age as I was when the wilderness preservation system was first established. It is my hope that her generation will enjoy the wild in these areas like I have, that it will witness the processes that have perpetually shaped nature, and that it will be able to one day celebrate the next big increase in eligible areas added to the wilderness preservation system. We need wilderness not only to sustain inter-generational connections to wild areas and to remind us of where we came from and where we are headed, but to ensure that in wilderness, nature untamed and its powerful forces will continue.

Dominick A. DellaSala, Ph.D., is a conservation scientist and author of the award-winning Temperate and Boreal Rainforests of the World in addition to more than 150 other technical papers.
THE COMPLEMENTARY VALUES OF WILDERNESS AND BIODIVERSITY

BY REED F. NOSS

As a naturalist since early childhood and a wilderness fanatic since my teens, I have no trouble reconciling in my mind the dual values of wild, remote areas and the fascinating richness of life in my own backyard. My psychological health (relatively speaking) depends on experiencing both, and I know as a conservation biologist that both wilderness and altered landscapes must be managed properly to perpetuate all that Nature contains. Hence, it troubles me that the wilderness preservation camp and the biodiversity conservation camp show little overlap in membership. With few exceptions, the people in these camps read different literature, attend different meetings, and speak disparate languages. Even more troubling is that proponents of “the new conservation science” disparage both wilderness and biodiversity as impractical, romantic ideals with little relevance to the global economy or to modern conservation realities. Ecosystem services – on which these people are focused – for the most part require neither wilderness nor high biodiversity. And if Nature does not provide quantifiable benefits to humans, the new conservation scientists argue, then what good is it?

Let’s set aside the arguments of the new conservation scientists. These people will never win over the hearts and minds of those who value Nature for its own sake and have an affection or compassion for living things and an intuitive appreciation of the wild. And, fortunately, there are still quite a few of us nature-lovers around. Nevertheless, if we are to assure a future with both untrammeled wilderness and the full richness of life, we must demonstrate how wilderness preservation and biodiversity conservation are different but overlapping and complementary values. Wildlife species with large home ranges that are sensitive to human persecution are secure only in large, wild areas. Similarly, natural disturbance regimes – among the most fundamental ecological processes – sometimes require millions of acres to operate normally and maintain a complete set of habitat conditions for species to occupy. On the other hand, much of biodiversity is comprised of small-range species (local endemics), especially plants and invertebrates, which often occupy rather small areas of unusual geological substrates, soils, or microclimates; these species have no need for wilderness as humans define it. A wilderness system designed with large carnivores (which are mostly habitat generalists) in mind might leave these species out. Yet their vital habitats require protection.

In this article I follow the International Union for Conservation of Nature (IUCN) definition of wilderness, “a large area of unmodified or slightly modified land and/or sea, retaining its natural character and influence, which is protected and managed so as to preserve its natural condition,” while recognizing that most large wilderness areas globally (Arctic tundra, boreal forest, Amazonia, Sahara, for instance) have relatively little area under formal protection. They have retained their wilderness character only because they are not easy and comfortable places for people to live. As we increasingly find ways to exploit and devastate remote areas worldwide, these last great wildernesses are in jeopardy. Keeping with tradition, I use a big “W” to indicate formally designated Wilderness areas in the United States. I especially champion “ecological wilderness”: roadless and largely self-managing ecosystems with intact food webs.

What Wilderness Can and Cannot Do for Biodiversity

Few wilderness areas were established for the primary purpose of protecting biodiversity, wildlife, ecosystems, or related values fundamental to conservation biology. Nevertheless, these values entered into the selection process in some cases. Everglades National Park, established in 1947, was the first U.S. national park to be established not primarily for its scenic values, but for protection of a wild ecosystem and its abundant wildlife. In 1978, 1.3 million acres (86 percent) of the park were designated as Wilderness to further promote these values. Unfortunately, the Everglades ecosystem has been degraded by water mismanagement beyond its boundaries and by invasions of exotic species, among other threats. An even bigger threat now is sea level rise; at least 60 percent of the park is projected to be swallowed by the sea within the next century. No wilderness is secure in a human-degraded biosphere.

Given rapid global change, it is more important than ever to ensure protection of the entire spectrum of ecological conditions. This will give species opportunities to adapt. At the Fourth World Wilderness Conference in 1987, delegates from 64 nations passed a resolution to preserve “representative examples of all major ecosystems of the world to ensure the preservation of the full range of wilderness and biological diversity.” Representation of ecosystem types is one of the best-accepted goals of conservation, following the...
logic that protecting viable examples of all ecosystem types will protect the vast majority of species without having to protect or manage each species individually. Large protected areas, especially Wilderness, are ideal for representing ecosystems because they permit a broad spectrum of natural disturbance-recovery stages and associated species to co-occur in the landscape.

The second Roadless Area Review and Evaluation (RARE II) process, initiated by the U.S. Forest Service in 1977, evaluated the representation of ecosystems within Wilderness and used this as one criterion for selecting potential new areas for designation. RARE II applied a combined ecoregion-vegetation (Bailey-Küchler) classification system. Not surprisingly, politics have prevented the protection of an adequate range of ecosystem types. A paper presented by G.D. Davis at a national wilderness colloquium in 1988 showed that only 104 (40 percent) of 261 Bailey-Küchler types were

A cypress swamp within the interior of a cypress dome in the Marjory Stoneman Douglas Wilderness of Everglades National Park in Florida. Everglades National Park, established in 1947, was the first U.S. national park to be designated primarily for ecosystem protection purposes rather than for scenic value.

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represented in Wilderness. I subsequently determined that only 19 percent of Bailey-Küchler types were represented in Wilderness areas of at least 100,000 hectares (247,000 acres) in size, and only 2 percent in Wilderness areas 1 million hectares (2.47 million acres) or larger. In 1999, John Loomis and Chris Echohawk found that 23 (66 percent) of 35 Bailey ecoregions (at the ecoprovince level) in the United States have less than 1 percent of their area protected as Wilderness; seven (20 percent) of the 35 ecoregions have no land protected as Wilderness. An analysis by the U.S. Forest Service examining changes in Wilderness acreage within broad division-level ecoregions from 1994 through 2009 showed gains mostly in deserts and associated mountain ranges, with virtually no Wilderness in the Prairie Division and very little in Temperate Steppe, Hot Continental, and Subtropical divisions. Clearly we need to do better at representing ecosystems in Wilderness, but this will be challenging in regions that lack substantial acreage in federal land.

Wide-ranging animals, such as large carnivores and migratory ungulates, are among the species that stand to benefit most from a well distributed and connected system of ecological wilderness. Wilderness (designated or not) is defined best by roadlessness or other measures of limited human access. Where there is a high level of human access, big predators will be shot, trapped, and poisoned, legally or not. Countless studies have validated this relationship, with very few exceptions. It is no accident that the cougar (spcifically, the Florida panther) survived east of the Mississippi River only in what was (and still barely is) the least accessible region in the East: the Everglades-Big Cypress ecosystem. And it is not just predators that are at risk in human-accessible landscapes. Any animal that is hated (for example, large snakes) and any species of high commercial value, such as orchids, cacti, and colorful snakes, are secure only in large areas that are difficult for humans to traverse.

Returning to the idea of ecological processes, natural disturbance and hydrologic regimes are essential for life. Consider fire. We know from ancient charcoal in sediments that fire has been on Earth for some 420 million years, and several lines of evidence show that many species have evolved adaptations to escape, tolerate, exploit, or even promote fire. Many species and entire ecosystems are fire-dependent — if humans exclude fire for long enough, these species and ecosystems disappear. Natural disturbance regimes often require immense areas to operate effectively. Steward Pickett and John Thompson recognized this and, in 1978, defined a “minimum dynamic area” as “the smallest area with a natural disturbance regime, which maintains internal recolonization sources and hence minimizes extinction.” For many vegetation types, only big wilderness can serve as a minimum dynamic area and essentially manage itself. In smaller areas, human management such as controlled burning is often necessary to maintain biodiversity.

Jerry Franklin, the authority on old-growth forests in the Pacific Northwest, pointed out at a wilderness conference in 1983 that the scale and degree of naturalness of wilderness ecosystems makes them unsurpassed as control areas for experiments in land and resource management. Franklin’s comments echoed those of ecologist Stanley Cain more than two decades earlier: “Wilderness areas are the only yardsticks we have — or can have — of the long-continued interactions of natural ecological laws. . . .” Yet, Franklin noted, little scientific use of wilderness has occurred, and this remains mostly true today. We continue to fail to use wilderness areas as baselines (however imperfect) for intensively managed lands, so that we might learn how the responses of species and ecological processes differ in wild versus highly manipulated landscapes.

The biggest limitation with relying on wilderness preservation to accomplish broad conservation goals is that the selection of wilderness areas has been, and probably always will be, biased against landscapes that are most productive for agriculture and human occupation. Despite the best attempts of conservationists, the “rock and ice” phenomenon prevails, with relatively little designated or de facto wilderness in biodiversity-rich low-elevation forests, grasslands, and shrublands. Protected areas there are mostly small, isolated from one another, and often degraded by adjacent land uses. Because of their biodiversity values, however, these “postage stamp” natural areas are every bit as important as big wilderness.

We Need Both Wilderness and Biodiversity

Russell Mittermeier and colleagues, in a 2003 paper, explored the potentially competing priorities of wilderness and biodiversity conservation. Mittermeier, following the early lead of biologist Norman Myers, is a champion of the “biodiversity hotspots” approach to conservation priority-setting. Hotspots are defined as regions that contain at least 1,500 plant species endemic to them and have lost at least 70 percent of their historic vegetation. They are irreplaceable and vulnerable. Global wilderness areas, on the other hand, were defined by Mittermeier and colleagues as at least 1 million hectares in size, retaining at least 70 percent of their historic habitat, and with human population densities of no more than five people per square kilometer. They found 24 global wilderness areas that met these criteria. Most of these regions are rather low in biodiversity, with only 18 percent of plants and 10 percent of
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terrestrial vertebrates endemic to individual wildernesses. The biologically richest wilderness areas are Amazonia, Congo, New Guinea, the Miombo-Mopane woodlands of southern Africa, and North American deserts. Properly, Mittermeier and colleagues recognized the complementarity of the wilderness and hotspot models for conservation, pointing out the aesthetic, moral, and spiritual values of wilderness as well as the critical function of large intact areas for maintaining ecological processes and providing ecosystem services and ecotourism values.

For me, the quality of wildness and the practice of natural history draw together the continuum from relatively pristine and intact wilderness to semi-natural lands that retain many to most of their presettlement species. One can find wildness close to home, even within major urban areas. I live on the edge of the immense and obscene Orlando metropolitan area in Florida, yet the Florida National Scenic Trail passes within a mile of my doorstep. I can get on it and hike for days or weeks (well, before my arthritis really set in) through landscapes that are semi-wild to near-wilderness – in a state with 20 million people. And the natural history is amazing.

Spending time in wild nature, we develop an aesthetic and visceral appreciation for wild things. We develop wonder and curiosity, which drives us to seek knowledge and understanding of nature. Some of us formally study nature; others simply like to get outside. Regardless, spending time in wild areas helps us develop respect and affection for nature. We are offended when we witness harm to nature, and we take action to reduce destruction. To keep from burning out, however, we must continue to spend abundant time in the wild. Thus, experience of the wild and study of natural history contribute directly and indirectly to conservation and to our physical and emotional well-being.

The vast majority of species do not require wilderness. Most, however, need a good degree of wildness: characteristic soils, clean water, pollinators and other interacting species, and at least moderately functional natural processes. Humans have altered essentially all ecosystems, and, ironically, are now often needed to manage ecosystems since natural disturbance and hydrologic processes have been disrupted and invasive species have proliferated. I can live with that, as long as I know that big ecological wilderness is still out there doing its thing, and still will be long after humans are gone from the Earth. ■

Reed F. Noss, Ph.D., is a professor at the University of Central Florida and serves as president of the Florida Institute for Conservation Science. One of the 500 most highly cited authors in all fields, Noss has nearly 300 publications. His latest book is Forgotten Grasslands of the South: Natural History and Conservation (Island Press, 2013).
in 1836, American Transcendentalist Ralph Waldo Emerson floated the idea that people were losing their spiritual connection to the land. “To speak truly,” he wrote in “Nature,” “few adult persons can see nature … In the wilderness, I find something more dear and connate than in streets or villages.”

While it took a few more decades for state and federal officials to codify these sentiments, Emerson’s idea wasn’t new. American views of the natural world had been evolving since the days of the Mayflower voyage, when Plymouth Colony Gov. William Bradford — a man who had fled imprisonment in England and crossed stormy winter seas to reach Provincetown Harbor, where his beloved wife fell overboard and drowned — described the Pilgrims’ new home as a “hideous and desolate wilderness, full of wild beasts and wild men.”

As the interior became increasingly settled and cut-over, a growing number of Americans began to recognize what was being lost. The Transcendentalists — along with their European counterparts, the Romantics — lamented the human
tendency to view nature merely as something to be conquered and dominated. Contrarians pointed out that America’s first people, the nomadic “wild men,” had lived on the continent for centuries without making much of a mark, taking only what they needed and honoring these gifts with gratitude.

One of the first Native Americans to voice this contrast was Pawnee Chief Petalesharo, who joined a tribal delegation in Washington, D.C., in November 1821. In a speech to President James Monroe, he revealed the damaging influence of a culture that viewed the nation’s natural resources as commodities: “Before our intercourse with the whites ... we could lie down to sleep, and when we awoke we would find the buffalo feeding around our camp – but we are now killing them for their skins, and feeding the wolves with their flesh, to make our children cry over their bones.”

Emerson’s “Nature” was a powerful and influential work not only because of its ideas, but also because of its timing: He wrote at the peak of the American Industrial Revolution, as milling and manufacturing operations were devouring New England forests. Emerson’s contemporary and disciple, Henry David Thoreau, became a leading voice for wilderness preservation. His two-year sojourn in a cabin on the shore of Walden Pond, on second-growth forest land owned by Emerson, inspired Walden, or Life in the Woods, considered today an American literary classic and a seminal work of the wilderness movement.

Thoreau wrote often of the need for civilized people to “live deliberately” in the natural world. In “Walking,” an essay he wrote shortly before his death in 1862, he wrote: “I wish to speak a word for Nature, for absolute freedom and wildness, as contrasted with a freedom and culture merely civil ...”
“There’s something sacred about being physically removed from your normal surroundings and placed in God’s creation. He meets us everywhere, but when you’re existing entirely in the midst of something created solely by God, you experience Him in deep and new ways.” —Emily Callon ’15

GREENVILLE COLLEGE ALUMNUS HOWARD ZAHNISER ’28 WAS THE PRIMARY AUTHOR OF THE WILDERNESS ACT OF 1964, WHICH CREATED THE NATIONAL WILDERNESS PRESERVATION SYSTEM THAT NOW INCLUDES MORE THAN 100 MILLION ACRES IN OVER 750 WILDERNESS AREAS. GENERATIONS OF PEOPLE WILL EXPLORE WILD SPACES THANKS TO ZAHNISER’S VISION AND DEDICATION.

Greenville College instills in students an appreciation for the outdoors and wilderness preservation. Zahniser’s passion remains alive through the school’s unique outdoor experiences such as classes in backpacking, canoeing, rock climbing, missions trips, and leadership and community development. Students proceed with confidence having faced adventure, experienced the unknown, dared risk, and found their way through.
That same year, in “Huckleberries,” Thoreau envisioned a future in which American communities shared these values:

*I think that each town should have a park, or rather a primitive forest, of five hundred or a thousand acres, either in one body or several – where a stick should never be cut for fuel – nor for the navy, nor to make wagons, but stand and decay for higher uses – a common possession forever, for instruction and recreation.*

**America’s First Official Wilderness**

In 1864, the idea of preserving American wilderness gained momentum when New Englander George Perkins Marsh published *Man and Nature*, one of the first works to document the effects of human activity on the natural environment. Marsh emphasized the importance of managing natural resources and keeping them in a condition that would assure their benefit to future generations.

Marsh also advocated the idea of public wilderness parks. The same year *Man and Nature* was published, President Abraham Lincoln signed a bill that set aside California’s Yosemite Valley and the Mariposa Grove of giant sequoias as a reserve to be used by the state of California for public use and recreation. It was the first time in history that a government anywhere in the world had set aside lands simply to protect them and allow for their collective enjoyment. The grant — along with the breathtaking series of landscape paintings by Thomas Moran of the Yellowstone wilderness — inspired Congress to make Yellowstone America’s first national park, “a pleasuring ground for the benefit and enjoyment of the American people,” in 1872.

Another leading wilderness advocate — one of the greatest publicists ever to work on behalf of wilderness — was the Scottish-American naturalist John Muir, whose personal history is inextricably bound with that of the Yosemite Valley, and whose name marks buildings and landscape features throughout California. Muir devoted much of his time to the preservation of Western forests, a mission his biographer, Donald Worster, described as “saving the American soul from total surrender to materialism.”

Muir once met Emerson in Yosemite and introduced him to the sequoias of Mariposa Grove, inviting the 68-year-old Harvard professor to stand among his “big brethren.” Emerson later called Muir a “new kind of Thoreau.”

California’s stewardship of Yosemite, Muir observed with disgust, allowed for widespread exploitation of, and considerable damage to, the valley’s resources. Flocks of domestic sheep, for example, which Muir described as “hoofed locusts,” were allowed to destroy the grasslands of Tuolumne Meadows. In 1892, Muir co-founded the Sierra Club, one of the nation’s first environmental organizations, in San Francisco, and served as its president until his death 22 years later. It was largely due to the lobbying efforts of Muir and the Sierra Club that Yosemite Valley and Mariposa Grove were later returned to federal jurisdiction and consolidated into Yosemite National Park.

Despite their grandeur, the accessibility of the nation’s new national parks, by definition, made them less than wild. When Marsh had written of managing the nation’s resources, he had been referring primarily to their economic importance. In upstate New York, Marsh’s ideas sparked a line of thinking that joined the spiritual value of wilderness, espoused by Muir and the Transcendentalists, with the idea that wilderness, in its unaltered state, might also have economic importance.

In 1871, a government surveyor raised the possibility that continued deforestation in the Adirondack and Catskill mountains might lead to erosion and water shortages that could render the Erie Canal, and perhaps the Hudson River, inoperable as waterways. Fourteen years later, the state
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legislature preserved 715,000 acres of forest – 20 percent of the state’s land area – in the Adirondacks and Catskills as lands that would remain undeveloped. The state’s lumbermen assailed the law for several years, until a revised version was passed in 1894 as a constitutional amendment.

Today known simply as Adirondack Park, America’s first wilderness reservation to be held without development has remained nearly unaltered to this day. One of the delegates to the conventions that produced this historic first was a conservationist by the name of Louis Marshall. Marshall, who later helped re-establish the State College of Forestry at Syracuse University, was one of the framers of Article 14, which contained the now-legendary “forever wild” clause:

The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the timber thereon be sold, removed or destroyed.

Marshall would be the first – but not the only – member of his family to play a leading role in the nation’s wilderness movement.

Conservation versus Preservation

Congress gave the U.S. federal government similar authority in passing the Forest Reserve Act of 1891, which allowed the president to set aside public lands as forest reserves managed by the Department of the Interior.

The different land-use ethics of the forest reserves and the national parks became more clearly drawn in the late 19th and early 20th centuries. One group, which included member Gifford Pinchot, who would later become the first chief forester of the United States, believed in preserving the nation’s natural resources primarily as economically valuable commodities that must be sustained over time, rather than consumed without limits. The placement of the agency Pinchot directed for its first five years, the U.S. Forest Service within the Department of Agriculture, was a clear indication of this view: Trees were a crop, to be carefully tended and grown for the benefit of humans. This idea – that natural resources should be managed to yield the greatest good for the greatest number of people – evolved to be known as “conservationism.”

On the other side were “preservationists,” such as Muir, who ended his friendship with Pinchot in 1897 after Pinchot publicly supported sheep grazing in the nation’s forest reserves. Preservationists sought to protect wilderness from human impact altogether, as New York state had done in the Adirondacks. The difficulty of preservationists’ argument was that – unlike in the Adirondacks, where the value of off-limits wilderness had been tied to the commercial viability of waterways – the value of what Thoreau had once called “higher uses” was essentially unquantifiable.

The national parks, while placing tougher limits on resource uses, were not, strictly speaking, preserves: They allowed for infrastructure to facilitate visitor access. Nevertheless it was these two agencies – the Forest Service, established in 1905, and the National Park Service, established in 1916 – that pitted two different land-use ethics against each other throughout the early 20th century.

The differences between Muir and Pinchot, which the two debated publicly in the nation’s leading periodicals, were fundamental to the controversy that arose in Yosemite around the turn of the 20th century. As early as the 1850s, water agencies had begun to propose the construction of a water reservoir on the Tuolumne River in Hetch Hetchy Valley, which lay in Yosemite National Park about 20 miles from the Yosemite Valley. Like its neighbor, Hetch Hetchy boasted sylvan meadows, huge granite domes, and cascading waterfalls; to Muir, it was every bit as spectacular as Yosemite.

When the city of San Francisco first coveted Hetch Hetchy’s waters, it met with Muir’s scorn: “Dam Hetch Hetchy!” he wrote. “As well dam for water-tanks the people’s cathedrals and churches, for no holier temple has ever been consecrated by the hearts of man.” Pinchot, on the other hand – though he had never seen Hetch Hetchy – wrote that “the highest possible use that could be made of it would be to supply pure water to a great center of population.”

Despite the passionate entreaties of Muir and the Sierra Club, President Woodrow Wilson authorized the dam in 1913, and Hetch Hetchy was doomed to be clear-cut and submerged under 300 feet of water. Muir never really recovered from the loss of this last battle. “It’s hard to bear,” he wrote to a friend. “The destruction of the charming groves and gardens, the finest in all California, goes to my heart.” Hetch Hetchy was a staggering loss – in the words of forest historian G.O. Robinson, “the Alamo of the wilderness, a symbol and a call to arms.”
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Preservationists in the Forest Service
For the next few decades, interestingly, the most powerful voices for preservation arose from within the Forest Service, which, under the precedent established by Pinchot, was one of the federal government’s most decentralized agencies. Chief Pinchot believed his field personnel, scattered among varied districts, were the best judges of most situations – and many of these field personnel had been drawn to the Forest Service by their own love of the land.

One of these was Arthur Carhart, a young Iowan whose first assignment was to survey a road around Trappers Lake in Colorado’s White River National Forest in order to plot several home sites. After completing his survey, Carhart recommended to his supervisor that the area should not be developed, but rather set aside for wilderness recreation. To his surprise, Carhart’s supervisor agreed, and the following year Trappers Lake was designated as an area to remain roadless and undeveloped. Carhart, at the age of 27, was the first to apply the wilderness preservation concept in the Forest Service.

Another young Iowan, Aldo Leopold, had joined the Forest Service in 1909 with the intent to better protect primitive wilderness areas. One of the most eloquent and persuasive voices in the history of the wilderness movement, Leopold was able, as an advocate for what he called “land as a community to which we belong,” to convince the Washington bureaucracy that areas of public land should be set aside and kept wild. On June 3, 1924, at Leopold’s urging, 750,000 acres in New Mexico’s Gila National Forest became the first area in the world to be managed as a wilderness area. The area would become known simply as the Gila Wilderness.

Bob Marshall was a preservationist who was instrumental in the establishment of early primitive areas, which later became wilderness areas when the Wilderness Act was passed, and was one of the founders of The Wilderness Society.

Among the most influential preservationists in federal government was Bob Marshall, who had grown up vigorously exploring the Adirondack forests his father, Louis, had labored to preserve (Marshall and his brother George set a record in 1930 when they scaled nine Adirondack High Peaks in a single day). Marshall and wildlife biologist Olaus Murie played important roles in the establishment in the early 1930s of the first primitive areas (which later became wilderness areas with passage of the Wilderness Act). Also of note is that, at Marshall’s urging, the Wind River Roadless Area, the first tribal wilderness, was set aside in 1937. Marshall, who served as chief of forestry in the Bureau of Indian Affairs (1933-1937) and head of recreation management in the Forest Service (1937-1939), believed the Forest Service’s administrative procedure for setting aside wilderness was tenuous: Ultimately the decision of executive branch appointees, it was subject to the political whims of an administration. In 1934, Marshall wrote to Interior Secretary Harold L. Ickes that wilderness areas “should be set aside by an act of Congress, just as national parks are today set aside. This would give them an approximation to permanence as could be realized in a world of shifting desires.”

In 1935, Marshall, Leopold, and six other prominent wilderness advocates incorporated the nonprofit Wilderness Society, an organization dedicated to protecting the nation’s last remaining wilderness for future generations. When Marshall died unexpectedly of an apparent heart attack in 1939 at the age of 38, his friends passionately took up their shared cause. A decade after its founding, The Wilderness Society was in the hands of people who would prove crucial to achieving Marshall’s goal of statutory wilderness in the United States. These leaders included Murie, an arctic researcher for the U.S. Biological Survey who was named a director of the Society in 1945; and Howard Zahniser, an environmental activist who, at around the same time, was named its executive secretary.

Howard Zahniser (left), principal author of the Wilderness Act, pictured with wilderness activists Mardy and Olaus Murie.
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Remembering the Alamo: Echo Park and the Wilderness Act

Zahniser, who had honed his skill within the communications departments of federal land-use agencies, wrote and spoke with poignancy about the need for statutory wilderness – not as a knee-jerk response to overdevelopment, but as a proactive, visionary effort to preserve the nation’s national heritage. “Let’s make a concerted effort,” he said in a 1951 address at the Sierra Club, “for a positive program that will establish an enduring system of areas where we can be at peace and not forever feel that the wilderness is a battleground.”

Unfortunately, another great battle lay ahead, and both the Sierra Club, led by David Brower, and The Wilderness Society would lead the fight. The U.S. Bureau of Reclamation’s plan for a Colorado River Storage Project aroused opposition when it was revealed that the plan included a proposed dam at the confluence of the Green and Yampa rivers in Echo Park, in the heart of Dinosaur National Monument’s canyon country.

Hetch Hetchy’s O’Shaughnessy Dam was now about 30 years old, a painful reminder to activists who were determined to prevent the loss of another pristine wilderness. The Wilderness Society and the Sierra Club launched an unprecedented campaign against the Echo Park Dam, posing the simple question: If a national monument couldn’t be kept intact, how could any American wilderness be considered safe from exploitation? Ultimately Brower and Zahniser achieved a compromise wherein the dam was eliminated in the final project authorization signed in 1956.

The Echo Park controversy is viewed today as a turning point that enabled a string of continued successes for the wilderness movement – and in fact, Zahniser, flush with victory, promptly began circulating drafts of a bill he’d written for the establishment of a national wilderness preservation system. He found a number of supporters, including Sens. Hubert Humphrey, D-Minn., and John Saylor, R-Pa., but also a powerful bloc of opposition from water agencies and the mining, timber, and agriculture industries.

Meanwhile Murie and his wife, Margaret (“Mardy”) – who had spent their 1924 honeymoon on dogsleds, tracking caribou through Alaska’s Brooks Range – were lobbying President Dwight D. Eisenhower to preserve an expanse of wilderness in Alaska’s North Slope region. The effort, joined by thousands of prominent preservationists, ultimately moved the president. Just before leaving office in 1960, he directed the secretary of the interior to set aside about 9 million acres as a federal protected area. Twenty years later, due in large part to the persistence of Mardy, the area was expanded to include more than 19 million acres, and renamed the Arctic National Wildlife Refuge – the nation’s largest national wildlife refuge.

Murie died in October 1963, just as Zahniser’s bill was gathering support. After eight years that included dozens of hearings, countless compromises and amendments, and more than 60 drafts, the Wilderness Act of 1964 was passed overwhelmingly (73 to 13 in the Senate, 373 to 1 in the House) and signed into law by President Lyndon B. Johnson on Sept. 3, 1964. Sadly, Zahniser missed the ceremony as well; he had died in his sleep just four months earlier. His wife, Alice, and Mardy Murie stood alongside the president as he signed the bill into law.

At the time, the Wilderness Act seemed the culmination of a movement that was more than two centuries in the making: the creation of the National Wilderness Preservation System (NWPS), protecting 9.1 million acres of federal land and creating a formal mechanism for the further designation of wilderness areas. Zahniser, one of the movement’s leading poets, described such areas in language now consecrated by federal law: “A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.”

But the law was merely the beginning of a new era, in which Americans have increasingly chosen to preserve wild areas and offer future generations, in the words of Johnson, “a glimpse of the world as it was in the beginning.” Since 1964, more than 100 wilderness bills have been signed into law, and the size of the NWPS has grown more than tenfold, embracing 109.5 million acres in 758 areas throughout 44 states and Puerto Rico.

It’s a remarkable legislative history for a value that can only be felt and not measured. But if the will of Americans, exercised through their elected leaders, is any indication, the ideas codified in the Wilderness Act continue to resonate, even if wilderness continues to mean different things to different people. Another lyricist of the movement, the Western novelist Wallace Stegner, was among many who attempted to articulate the human need for wilderness when he wrote to support the law in 1960:

... we need to put into effect, for its preservation, some other principle than the principles of exploitation or “usefulness” or even recreation. We simply need that wild country available to us, even if we never do more than drive to its edge and look in. For it can be a means of reassuring ourselves of our sanity as creatures, a part of the geography of hope.

Craig Collins is a veteran freelance writer and a regular Faircount Media Group contributor who has almost 20 years of experience reporting about government, the military, health care, and the sciences.
WILDERNESS ON THE HORIZON

THE POTENTIAL FOR FUTURE WILDERNESS

BY BART KOEHLER

Every wilderness area that’s ever been protected by law has a story. And every one of these stories began with people who cared. You, our bedrock grassroots stalwarts, are the ones who really make a difference. You are the ones who have helped make the Wilderness Act such an extraordinary example of landmark legislation that puts democracy to work for a truly worthy cause. You and people like you will be the ones who will help Congress make our hopes for future wilderness areas a reality during the wild times ahead.

Here’s something astonishing: The Wilderness Act is a 50-year-old law. Not only has it worked amazingly well, but it’s still at work today. An awful five-year dry spell in Congress for wilderness laws appears to have come to an end with the designation of the Sleeping Bear Dunes in Michigan as a wilderness area. I view this welcomed action as a huge step that should serve to break a longstanding logjam in Congress, and be the first of many wild measures enacted before the end of 2014.

The growing list of proposals awaiting action in Congress includes many special public lands across America the Beautiful that should eventually be secured as new wilderness areas. Just consider this list of magical places with colorful names:

- in New Mexico – Cerros del Norte, Organ Mountains, Cumbline-Hondo, plus eventual additions to the Pecos Wilderness;
- in Colorado – Hermosa Creek (“hermosa” means “beautiful” in Spanish), San Juan Mountains, and Browns Canyon;
- in Montana – Rocky Mountain Front and approximately 700,000 acres of special wild places included in the Forest Jobs Bill;
- in Nevada – Pine Forest Range, Wovoka, Burbank Canyons, Gold Butte, and a long list of proposed wilderness areas sweeping across the Silver State that would safeguard important sage grouse habitat;
- in Oregon – Wild Rogue, Devil’s Staircase, and Oregon Treasures;
- in Washington – Alpine Lakes and Wild Olympics;
- in Idaho – Boulder-White Clouds;
- in Maine – Maine Coastal Islands;
- in Tennessee – lands specified in the Tennessee Wilderness Act;
- in Arizona – lands specified in the Sonoran Desert Heritage Act; and

Also, there are wilderness proposals in the works that have yet to be introduced by Congress but are coming around the bend. Admittedly, some of them are longer-term efforts than others. They include:

- in Arizona – Land of Legends Areas including the Whetstone Mountains, Cochise Head, and Cochise Stronghold; Tumacacori Highlands; and eventually wilderness for Aldo Leopold’s Blue River Country;
- in North Dakota – Lone Butte, Bullion Butte, Long-X Divide, Twin Buttes, and Kinley Plateau, as the Prairie Legacy wilderness areas in the Little Missouri National Grasslands;
- in Wyoming – Rock Creek addition to Cloud Peak Wilderness, and the Du Noir Valley;
- in Virginia – new wilderness areas and national scenic area protections in the George Washington National Forest; and
- in Alaska – eventually the long-awaited enactment of the Chugach National Forest’s Nellie-Juan Wilderness.

I, for one, am hopeful that many of the proposed wilderness areas on this long list will garner safeguards as wilderness areas by law, and will be designations that we can celebrate as part of the Wilderness Act’s 50th anniversary, although perhaps a little bit after the Sept. 3 anniversary date. And depending on how these all come to pass, we could potentially witness congressional actions that will establish lasting protections for as many as 2 to 3 million acres of new wilderness areas, maybe even more.
The Pinchot Institute is proud to celebrate 50 years of conserving America’s wilderness.

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Optimistic? Yep. Impossible? Heck no! And this doesn’t really touch on many more millions of acres of lands managed by the Bureau of Land Management in Utah, Wyoming, Idaho, and other Western states, plus new national forest proposals that are upshots of the U.S. Forest Service forest plan revisions, like Wyoming’s two Rock Creek roadless areas proposed for wilderness by the Forest Service – one in the Bighorn Mountains and one in the Medicine Bows.

As we look to the future, I am heartened by the fact that when we strive to pass wilderness legislation, we are truly engaged in democracy at work. By using the Wilderness Act, we are effectively taking the law into our own hands. We are working within our political system, garnering support from our champions in Congress, and helping shape a better future for our public lands. Think about it: The wilderness designation process begins with grassroots folks drawing some lines on a map, and when at long last these lines become the boundaries of a new wilderness area, we can bear witness that we have helped Congress change the face of the American landscape in a very positive and enduring way. We owe so much to so many unsung grassroots heroes who’ve dedicated their lives to safeguarding their special places – in the past, the present, and on into the future. Their undyingly devoted work is truly a labor of everlasting love.

The Wilderness Act embodies the true spirit of patriotism. The word “patriot” means “one who loves their country and guards it from harm.” And starting with sponsorship of the Wilderness Act, that has included both Republican Party leaders and Democratic Party leaders. Throughout the decades since the Wilderness Act was signed into law, leaders from both political parties have been champions for wilderness area designations. The protection of wilderness areas is not a partisan political issue. Wilderness is an all-American issue. All of us are true patriots for our country’s special wild places, and as patriots, we work within our “government by the people” to defend and safeguard these places against all odds. Rachel Carson put it this way: “Protecting the planet is our finest form of patriotism.”

It’s important to remember that every American citizen owns our public lands. And while the ownership of these public lands is one of our greatest liberties and most deeply held freedoms, the protection of said lands is also one of our
You may not think of a flashlight as an essential tool, but a nightly trek without one would be like having to use a leaf when nature calls...never pretty. Let’s hope you remember what poison ivy looks like. Was it two leaves or three?

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Milestones such as this anniversary event are truly terrific experiences: They lift our spirits, unite us in our efforts, and energize us to face the challenges coming around the bend. Think about these words from a song I wrote long ago: “Stay strong, sing sweet, and hold your ground, as long as you can stand. Just look around, you’re not alone, when we save our wild, wild lands.” But wilderness warhorses like me know full well that once the celebrating is done, we must focus on the day-in and day-out follow-up work that’s so vital for effective organizing and mobilizing to build the ever-growing support that will be needed to keep gaining vital ground for many new wilderness areas. So savor the best of this celebration, and then tighten up the cinch, saddle up, and hang on tight. There’s a great wild ride ahead. Be sure to remember to “always ride a bucking horse uphill,” because we truly are headed for more wilderness on the horizon.

Bart Koehler is one of the most respected wilderness warhorses in the United States. Over the past 40 years, he’s helped bedrock grassroots groups all across our country from Wyoming to Alaska, and from New Hampshire to Nevada, to secure permanent protections for well over 8 million acres of our public lands. He is now the coordinator of the American Wilderness Project.
A PHOTOGRAPHER IN THE WILDERNESS

BY JOEL SARTORE

As a contributing photographer for National Geographic, I’ve been around some. More than 35 stories have led me to every state and every continent. I’ve got a million photos to prove it.

Usually, the pictures come easy because the places I visit are heavily populated and thus, visually loaded. Everywhere, I see layer upon layer of people, working like ants, relentlessly tearing down and building up cities and sprawl until they’ve manufactured entire landscapes. Nothing but our endless endeavors showing from horizon to horizon.

And when the time comes to clean up a bit, I know just what to do: I visit a wilderness.

At first these places are shocking in their scale. These are not landscapes for the timid. They are vast, unbroken, and untouched. They’re supposed to be.

So just where does a photographer start in a place so overwhelming? We must have interesting subjects, after all, from grand vistas to grizzly bears. We know they’re out there, somewhere. Now we must find them.

Physically, the work is often too wet or too dry, too hot or too cold.

Or too buggy. Seems like it’s always too buggy. And it is wonderful.

The essence of the Wilderness Act was to set aside spaces untrammeled by man. This means we’re just passing through, and without the usual haze of fumes and noise that follow us constantly these days.

Rough, raw, and real, true wilderness should look as if we humans never existed. It is nature at its finest, clean and epic.

And so those of us keen to create lasting images begin by simply being observant and patient. We search for days seeking spots of color, natural patterns, and scenes too pristine to even be imagined in the rest of our weary world.

With tripods and cable releases, we use very long shutter speeds to create dreamy images of flowing water and slow-moving clouds. Only still photographs can pull this off.

For wildlife, we try to get a sense of what the animals are doing, and where, at any given time of day. We use very long lenses, but we also use remote, weatherproof cameras, allowing animals to take their own pictures, in their own time, when they walk through a scene and break an infra-red beam. Sometimes this takes weeks, or even months.

But above all, we wait for light that’s as magnificent as each place itself.

Usually it lasts just a few brief moments, at dawn and dusk, when twilight, firelight, and flashlight all intersect.

And in the evening, when all light is gone, we lie down, look up, and think how remarkable this is, that once upon a time, human beings actually worked together and created a series of protected areas unlike anything the world had ever seen before. Could we even imagine passing such a law today?

This great accomplishment is not lost on those of us who prefer to sleep out under the stars.

With wilderness all around, we close our eyes, breathing in the sage-scented air. On this night at least, our conscience is clear.

Joel Sartore has produced more than 35 stories from around the world as a freelance photographer for National Geographic magazine. He is an author, speaker, and teacher who captivates audiences with his funny and inspiring adventures.
A nearly 30-mile trek through the mountains eventually leads to a remote valley and a large dry lakebed called the Racetrack Playa, where one of the world’s most mysterious phenomena occurs. While no one knows for sure exactly what causes these rocks to move, scientists speculate that freezing temperatures in combination with moisture and wind could be the catalyst in this natural mystery. A magical evening boasted blazing skies, creating an angelic ambiance that reflected off the Racetrack. There was something very haunting and evocative about the sense of isolation in this scene that captures the story of the Racetrack Playa beautifully.
I drove to the top of Mount Evans, a 14,000-foot peak, with my wife one afternoon in July. After several hours of shooting a herd of mountain goats, a storm rolled in across the valley, and soon the lightning started. The baby goats got very anxious, running and jumping over the rocks – and over each other – with nervous energy from the incoming storm. I kept shooting until my hair was standing on end and the sky was nearly dark. I love to capture behaviors and personalities of wildlife, and this was one of the best shooting opportunities I’ve ever had.
Aurora Borealis over Honeymoon Rock
Apostle Islands National Lakeshore, Gaylord Nelson Wilderness, Wisconsin, USA
Photo by Jeff Rennicke

One of my favorite places has always been Honeymoon Rock, a haiku of stone, a small rock outcropping north of Basswood Island. I dreamed of a night shot. I knew I’d have to stand chest-deep in cold Lake Superior with my camera on a tripod inches above the water, so it would have to be calm, warm, and clear. But first, I would have to get there. An old friend and boat captain took me out on the lake. Just as we pulled slowly up to the north end of the island, almost blinded by the darkness, the Northern Lights burst on and guided us to the perfect spot.

Glacial Stream
Tracy Arm-Ford’s Terror Wilderness, Alaska, USA
Photo by Irene Owsley

Traveling by kayak for eight days with two rangers during an artists’ residency program, I was intensely aware of a world defined by moving water. Dawes Glacier, the great carver of this landscape, loomed above. In the glacial streams, water was constantly flowing, crushing and moving rock, working on the palette of the landscape. Wanting to make an image of these dynamic forces at work, I set up my tripod in the stream. I was captivated by the smooth granite slide, the multicolored rocks at its base, and the motion of the tide. The setting was primeval, exuding the essence of self-willed landscape.
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Red Fox, *Vulpes vulpes*
Denali Wilderness, Denali National Park and Preserve, Alaska, USA
Photo by Dee Ann

The fall colors of Denali this year had locals and photographers alike saying, “These are the most extraordinary colors I have seen here in 30 years.” Around every curve of the road was another canvas of breathtaking colors. These frolicking red foxes brought another hue of red to the palette of colors adorning the subarctic tundra. After spending more than an hour watching these two rousting about, darting beneath and around the vibrant dwarf birch, and tantalizing one another, it is easy to understand where the dance term “the fox trot” originated.

Proxy Falls
Three Sisters Wilderness, Oregon, USA
Photo by Thomas Goebel

After taking a wrong turn and hiking to the wrong waterfall, I was anxious to get back on the trail to Proxy Falls the next day. As we arrived at the base of the waterfall, I was speechless. The sheer size and power of this waterfall was truly amazing. The moss that surrounded the falls seemed to glow. As a photographer, I strive to portray the world as I see it so that I may share it with others. This location, however, was quite a challenge to capture through my lens. This gem is one that you must see for yourself.

Little Blue Heron, *Egretta caerulea*
J.N. “Ding” Darling Wilderness, Florida, USA
Photo by Nate Zeman

Little blue herons are one of my favorite birds to photograph. This particular one really caught my eye with its vibrant colors while preening its feathers. The small pond behind the bird offered a simple yet nicely abstract background for the image.
t was raining when we crossed the border. There was no checkpoint, there were no signs, just a path disappearing into the shrouded mountains. Although it was an invisible border, it separated two different countries. On one side – the country we had left – was the cacophony, convenience, and safety of modern civilization. On the other side – the country we were entering – the silence, struggle, and self-reliance of remoteness.

This new country could only be reached on foot or by horseback. The border sundered human locomotion by motors and wheels from movement via lungs and legs. Which meant we would find no roads or highways in this country, only footpaths. With no roads, there would be no cars, no restaurants, no hotels. Without these services, there would be few humans. Instead, there would be other species, elk, deer, and bears.

The rain blew sideways, slanting through the tall pine trees and obscuring the high peaks. Oliver and I pulled rain jackets on beneath our backpacks and kept walking. We had visited this isolated country together many times and knew what to expect. At a dogleg in the trail we cut west, using a downed tree as a bridge over the river. The next creek we were obliged to ford, holding our sneakers west, using a downed tree as a bridge over the river. The water was icy and the stones sharp underfoot. Brookies darted beneath the cut bank.

On the far side, there was no trail. We could see where elk had leapt over the deadfall, their hooves breaking branches, but we were less powerful, less agile beasts. At first we tried following the creek up the valley, but it morphed into a defile with crumbling, insurmountable walls. We backtracked down over the slippery, moss-coated boulders and began zigzagging up through steep timber.

Twice we found ancient, rotting tree trunks that had been flipped over by hungry grizzlies hunting for termites, ants, or grubs. Atop one ridge, in a clearing affording an expansive view, there was a large mound of bear scat filled like a pie with berry kernels. Mule deer tracks were everywhere, of course, but we were making so much noise, these big-eared, fleet-footed inhabitants were long gone before we ever had a chance to see them.

With heavy packs it was hard going. We talked little, used our trekking poles for traction, and sweated profusely. After six hours of hard hiking, we reached tree line and used our trekking poles for traction, and sweated profusely. After six hours of hard hiking, we reached tree line and

**THE IMMUTABLE LINK BETWEEN ADVENTURE AND WILDERNESS**

**BY MARK JENKINS**

of them were unclimbed. We studied each one – identifying lines of weakness – with a monocular. When darkness curtained down over the peaks, we crawled into our crepuscular tent. I set the alarm for 5 but we failed to get moving until 6 the next morning.

Our objective for the day was the southeast prow of the unknown, unnamed, unclimbed tower looming directly above our tent to the west. We hiked up tumble-prone talus to the base, donned helmet and rock shoes, and roped up. We had no idea if the massif even could be climbed. On the very first move, I pulled off a basketball hunk of rock. Shortly afterward I had to leave my pack behind because I couldn’t squeeze through two panels of stone. I eventually popped out the top, like a scraped slice of white bread from a toaster.

It started snowing on the second pitch. On the third pitch we were prepared to retreat, but the sun, ridiculing our fears, came out instead. After 900 feet of climbing, pulling off or almost being pulled off by loose rocks and blocks, we summited. Oily clouds wereumping above our heads and we had no idea of the descent. No matter, we’d figure it out. We had to. We ate lunch on a beak of rock extending out into space, so high in the sky it took us a long time to spot our tent in the valley below. Being the first to climb this formation, we named it Trepidation Tower.

The next day we ascended the unclimbed north face of a monolith called The Bottle. We slipped from our warm sleeping bags before dawn and were climbing in peach-colored light at daybreak. Every pitch was pure exploration. Through several airy traverses, we linked a series of vertical cracks we’d spied from camp the night before. In the end, our line was clean and uncontrived and we again summited just after noon. Lightning was exploding around us as we scurried down from the top.

The following day we climbed another new route on the west face of Squaretop. We found evidence of previous climbers, a few old slings in the couloir, but their ascent or attempt remains a mystery. Through mistakes that were

**IN A WILDERNESS, HUMANS ARE FORCED TO ADAPT TO NATURE, RATHER THAN BULLDOZE OVER IT. IN WILDERNESS, HUMANS ARE VISITORS, NOT PERMANENT RESIDENTS.**

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The author’s climbing companion, Oliver Deshler, atop Trepidation Tower in the Bridger Wilderness of Wyoming.
IT'S CALLED The GREAT OUTDOORS FOR A REASON

CELEBRATING 50 YEARS OF THE WILDERNESS ACT
national forests, national grasslands, and Bureau of Land Management tracts of land have been extensively and often irreparably exploited – clear-cut, strip-mined, over-grazed, roaded, and desertified. The only relatively untouched, ecologically functioning scraps of landscape left in the United States are the 738 designated wildernesses.

The prohibition of roads is the crucible for wilderness protection. There are almost 4 million miles of paved roads in the United States and more than 430,000 miles of dirt roads in our national forests. East of the Mississippi, the nation is so heavily highwayed that remoteness no longer exists: It is not possible to be more than 10 miles from a road. West of the Mississippi, the countryside has been drawn and quartered by road graders. Paved county roads checkerboard farmland from Iowa to Idaho, gravel roads stitch together the ranches, ranchettes, and resorts.

If it weren’t for the Wilderness Act, the Wind River Mountains (the Tetons, the Bob Marshall, etc.) would be just like the Alps – tunnelled and hoteled and tamed. There would be roads up every valley, a tram to the top of every peak, a bar at the base. There would be no unclimbed walls left. Everything would have been discovered, there would be a guidebook telling you where to go and what to see, and thus the potential for actual adventure would be significantly diminished. Adventure, by definition, is “an undertaking involving danger and unknown risks.” Without the element of the unknown, there is no adventure. Untrammeled nature is unpredictable, and unpredictability is the nature of adventure.

In the wilderness, unlike in civilization, you can’t rely on someone else to solve your problems. It’s you and your buddies and that’s it. Conviction is requisite and consequences inescapable. Wilderness is without the safety net of society. There are no handrails, so it’s up to you to keep your balance. There are no permanent structures, so you can’t hide from the weather. If it snows, you get cold. If it rains, you get wet. If the sun shines, you rejoice. Adventure happens when you can’t take the easy way out.

The great Austrian mountaineer Kurt Diemberger, the sole person to have made the first ascent of two 8,000-meter peaks, believes that the only way to protect the last wild places on Earth is to enforce “the barrier of physical effort.” This is exactly what the Wilderness Act does. If you want to experience the solitude of the wilderness, if you want to measure yourself against mountains, if you want to regenerate your wonder through undiluted wilderness, you have to walk to do it – just like the other residents of this peerless country, the elk, the deer, and the bears.

Wyoming-based Mark Jenkins is a journalist and seasoned climber who has written for National Geographic and Outside Magazine, among many other publications. He is the author of four books: A Man’s Life: Dispatches From Dangerous Places; The Hard Way: Stories of Danger, Survival, and the Soul of Adventure; To Timbuktu: A Journey Down the Niger; and Off the Map: Bicycling Across Siberia.
WILDERNESS AND ECONOMICS

BY THOMAS M. POWER AND GEORGE WUERTHNER

“A national park will not save the area. Rather, the restrictions and red tape that come with federal control would inhibit growth. Survival requires economic development, but a national park will limit our options.” — Kathy Gagnon, Bangor Daily News, May 11, 2014

Wildland preservation is motivated by a variety of ethical, biological, cultural, and recreational concerns. Rarely are efforts to protect wildlands motivated by an interest in promoting economic growth. Those working on wildland preservation issues have been forced to take up with the issue of local economic impacts because those supporting commercial development of wild natural landscapes emphatically assert that wildland preservation damages the local and national economies by restricting access to valuable natural resources and constraining commercial economic activity that otherwise would take place.

The above quote from a recent editorial in the Bangor Daily News represents a frequent response that people have to any proposal to designate lands as parks, wilderness, or other wildlands reserve. Yet numerous economic studies suggest that protecting landscapes for their wildlands values at the very least has little negative impact on local/regional economies and in most instances is a positive net economic benefit. Not only are there economic opportunities that come with protected lands, including the obvious tourism-related business enterprises, but land protection has other less direct economic benefits. Wilderness and park designation creates quality-of-life attributes that attract residents whose incomes do not depend on local employment in activities extracting commercial materials from the natural landscape; they choose to move to an area to enjoy its amenity values.

Wildlands designation can also reduce costs and expense for communities by providing ecosystem services that would otherwise entail costs to taxpayers.

Most importantly, wildlands protection is often the best way to preserve biodiversity, which is the foundation for evolution. There is a great ethical, emotional, and economic cost to species loss and ecosystem degradation.

Indeed, the overwhelming evidence from many case studies and reviews around the country demonstrates that wildlands protection is an overall positive net economic benefit to communities and regional economies and contributes to an enhanced quality of life.

Despite these economic advantages to wildlands protection, opposition is often based upon the flawed perception that legal protection for land will seriously harm the local economy. Some historic context may be in order.

Starting with Yellowstone National Park, the nation’s first wildlands preserve, people have been lamenting how land protection policies would stifle economic development. For example, upon the designation of Yellowstone in 1872, the Helena Gazette opined that the creation of Yellowstone was “a great blow to the prosperity of the towns of Bozeman and Virginia City.” Yet today, most Montana residents, particularly those in Bozeman, would agree that
Yellowstone National Park is one of the primary economic engines of the regional economy. Similarly, when Jackson Hole National Monument was established by Franklin Roosevelt in 1943, the local leaders of Jackson declared that Jackson would become a “ghost town.” So certain were they that monument designation would be an economic disaster that Wyoming’s congressional delegation introduced a bill to eliminate the park. The bill successfully passed both houses of Congress. The monument only survived because Roosevelt vetoed the bill. Today, Jackson is anything but a ghost town, and has one of the most vibrant economies in Wyoming.

**THERE IS A SIGNIFICANT BODY OF RESEARCH THAT DEMONSTRATES THE CONNECTION BETWEEN PROTECTED AREAS AND ECONOMIC WELL-BEING.**

Despite initial opposition to the establishment of Grand Teton National Park and Jackson Hole National Monument (which is now part of Grand Teton) and fears that wilderness designation would hurt the local economy, such concerns have proven to be unfounded. Today, Jackson, Wyo., has one of the most vibrant economies in the state.
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Indeed, the concept that protecting lands is a net benefit to communities is so well established today that more than 100 economists recently sent a letter to President Barack Obama urging him to designate more national monuments and protected public lands.

To quote from that letter: “As economists and academicians in related fields, we believe that federal protected public lands are essential to the West’s economic future. These public lands, including national parks, wilderness areas and national monuments, attract innovative companies and workers, and are an essential component of the region’s competitive advantage.”

There is a significant body of research that demonstrates the connection between protected areas and economic well-being. That does not mean that in every case, one can draw a direct connection between prosperity and land conservation. Nevertheless, despite assertions to the opposite, there is no evidence that designation of wilderness results in job losses in logging, mining, and other natural resource industries.

Counties with protected federal lands had greater jobs growth and higher per capita income than counties with lower percentages of protected lands. In particular, those counties that had more than 30 percent of their land base in federal protected lands experienced annual job growth during the last 40 years of 3.8 percent, while counties with no protected lands languished with annual job growth of only 1.5 percent.

There is evidence that designated wilderness enhances private property values without a rise in the demand for public services. In the Green Mountains of Vermont, Spencer Philips found that towns in or near designated wilderness had higher property values than those farther away. This is based upon the demonstrated relationship between quality-of-life attributes – which often include high-quality recreational opportunities as well as protected natural environments – and people’s decisions to locate near such natural amenities.

For instance, in a study of fast-growing counties, researchers found that 45 percent of the longtime residents and 60 percent of the new residents in counties with designated wilderness indicated that the close proximity of formal wilderness was an important criterion for their decision of where to live. And Power found that quality of life was a major reason for people choosing where to locate businesses and their homes, and was more important than other factors commonly cited, like local tax levels.

In particular, the attraction of protected landscapes spurs the movement to wilderness counties of “footloose” businesses and retirees who bring “outside” money to local economies. This can help to diversify rural communities, providing them greater economic stability. A recent example of this diversification created by protected landscapes is the designation of the Grand Staircase-Escalante National Monument in Utah. Personal income from labor in Garfield County, where the monument is located...
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Photo by Kevin Proeshcoldt
located, grew by 14 percent in the four years prior to Grand Staircase’s establishment, but grew by 18 percent the four years after designation. At the same time, unemployment fell from 12.4 percent in 1995 to 9.2 percent in 2001. In Kane County, another monument county, personal income grew 27 percent in the four years prior to the monument’s creation, and grew by 33 percent in the four after monument establishment. Unemployment there also dropped, from 8.7 percent in 1995 to 3.5 percent in 2001.9

Another study analyzed the economic impact of creating a Maine Woods National Park in Maine and estimated that new residents drawn to the area would create an additional 3,600 jobs in the first 20 years after park creation. This would be due to businesses drawn to the area as well as the normal mix of businesses that support households in any location. An additional 1,500 jobs would be created in tourism-related enterprises.10

These sources of non-wage income are often ignored or unappreciated by many longtime rural residents. There is a tendency to believe that employment at a timber mill or on ranches is the driving force in rural areas, when frequently the income from transfer payments is a larger part of the economic picture. In many rural counties, such “transfer” payments from retirement, investments, and other sources make a bigger contribution to personal income than “resource” jobs. In 2011, non-wage income contributed to 34 percent of the total personal income and 60 percent of the growth net personal income during the last decade. 11

Per capita income in Western nonmetropolitan counties with 100,000 acres of protected public lands was on average $4,360 higher than per capita income in similar counties with no protected public lands.12

Another economic benefit of protected lands is what is termed “ecosystem services.” For instance, 33 percent of the West’s water comes from national forests. Protected lands like Forest Service wilderness areas produce extremely high-quality water that provides the drinking and irrigation water for many Western communities.13

High-quality water is also essential to other economic activities. For example, fly-fishing is now a prominent activity in many Western communities. Everything from guiding and fly shops to local cafes and local real estate values benefit from high-quality fly-fishing opportunities. A study in 1990 estimated the economic value of high-quality stream fishing in Montana to be worth $5.5 billion.14

Carbon storage is another value of wildlands. Trees and other vegetation are able to store tremendous amounts of carbon and continue to sequester carbon during their life spans. Preserving forests on site as wilderness or parks reduces carbon in the global atmosphere. To quote from a study of the economic value of carbon storage in protected areas in Canada: “The 39 National Parks in Canada have sequestered a total of 4.43 gigatonnes of carbon in various pools. … Total economic value of stored carbon in the national parks is estimated to be $72-78 billion. However, this value could range between $12 [billion] and $2,216 billion depending upon society’s valuation of the carbon sequestration function of the protected areas.”15

A final way that protected lands have economic value is in avoided costs. Resource exploitation has many negative impacts that are often borne by society, future generations, and natural ecosystems. Cleaning up the waste from abandoned mines, repairing streams trampled by livestock, and recovering salmon populations harmed by sediment from logging roads are all well documented costs that have, over the years, been transferred to taxpayers and future generations as a consequence of the commercial exploitation of natural landscapes. Protecting land in wilderness areas, national parks, and other protected landscapes avoids these potential costs.

The value of protected areas for economic prosperity in today’s world is clearly well documented. In most cases, protecting land, rather than exploiting it, is by far the wisest economic and economic development prescription. In that sense, the economic arguments used against protecting wildlands are factually and conceptually flat out wrong.

As pointed out above, ongoing residential development in many of America’s rural areas is importantly supported by the open space, scenic beauty, wildlife, recreation opportunities, and overall environmental quality that existing wildlands provide. But that ongoing residential development also is one of the most powerful forces threatening wildlife habitat, air and water quality, and open space. So those working to protect wild natural landscapes are often hesitant to use economic analysis in support of wilderness protection, fearing that that would embrace a quantitative economic growth philosophy that is seriously in conflict with environmental quality. However, surrendering economic analysis to anti-wilderness activists when their economic arguments are simply wrong may involve surrendering an important tool that can be used to help defend the entire suite of important values associated with wilderness.
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Many wilderness advocates also object to assigning a monetary value to wilderness given that wildlands have irreplaceable values that economics cannot capture. Some would suggest that even attempting to put an economic value on wildlands devalues them. However, since many opponents of wildland protection argue that wilderness designation harms local economies and local economic well-being, demonstrating that – in addition to the spiritual, ecological, and ethical values associated with wilderness – there is also a positive economic aspect to wilderness can help refute those negative economic assertions. The qualitative values associated with wilderness are not one-dimensional. The range of wilderness values is extremely broad: ecological, spiritual, aesthetic, ethical, cultural, etc., that lie beyond monetary calculation and the economist’s focus on tradeoffs. However, pointing out that there is also positive economic value associated with wilderness does not challenge or undermine those broader and more fundamental wilderness values. It adds a dimension that, while certainly not dominant, may speak to an important local concern.

The fact is that the biggest long-term economic problem most areas face is managing growth, not coping with long-term economic decline. Going forward, we will have lots of economic opportunities: We are not beggars; we can afford to be “choosers”; and we have an ethical obligation to the land and future generations to be good choosers. That was the original vision that brought the Wilderness Act into existence a half-century ago, and the one that should continue to sustain efforts to permanently protect our remnant wild landscapes.

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Thomas Michael Power is the former chair of the University of Montana Economics Department. He has written Post-Cowboy Economics: Pay and Prosperity in the New American West; Environmental Protection and Economic Well-Being: The Economic Pursuit of Quality; and Lost Landscapes and Failed Economies: The Search for a Value of Place, among other publications on the link between wildlands and economic opportunity.

George Wuerthner is the senior scientist for the Foundation for Deep Ecology and has published 37 books, including a number that deal with wilderness areas and protected areas. His forthcoming book, Protecting the Wild – Parks and Wilderness as the Primary Strategy for Global Conservation, will be published by Island early in 2015. He has visited more than 400 designated wilderness areas around the country.

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A DIVERSITY OF AMERICAN WILDERNESS

BY ERIK MOLVAR

ake a moment, and mentally envision a wilderness landscape. In your mind’s eye, what kind of landscape did you see? Chances are, you visualized a landscape of towering mountains, primeval forests, or brawling waterways. Aesthetically, people tend to be attracted to lush vegetation, sparkling waters, breathtaking drop-offs, and soaring peaks. Small wonder, then, that in the early decades of wilderness protection, congressional designations were overwhelmingly forested ranges, alpine meadows, and jagged pinnacles. We are awed by that which dwarfs us. The vastness and untamed nature of wilderness lends perspective to our relative insignificance as individual humans.

Wilderness designation requires congressional legislation, and balancing the interests of competing uses of the land is a prime political consideration. In cases where interest in public recreation outweighs industrial development, wilderness designation arouses less controversy and opposition. Thus, many mountain chains popular for recreation but of limited industrial value have received wilderness protection. This vast acreage of mountain wilderness is necessary to absorb the legions of wilderness enthusiasts who seek them out.

There is widespread recognition that our national wilderness system is heavily weighted toward the “rock and ice” landscapes of mountain ranges above the timberline. This perception is borne out by scientific analysis. A recent study by the U.S. Geological Survey (USGS) found that the top three natural systems by percentage of land in a protected area status – alpine grassland, alpine sparse and barren, and alpine avalanche chute and shrubland – were all found above tree line.

Western mountain wilderness and its dense coniferous forests play key ecological roles. Vast ranges, remote valleys, and dense forests provide an ideal setting for the recovery of large native carnivores like the Mexican wolf of the Gila Wilderness, or the grizzly bear and grey wolf, which thrive in the mountain fastnesses of the Bob Marshall Wilderness and the high divide straddling Montana and Idaho.

Wilderness also has a unique significance in protecting native ecosystems, because in wilderness it is not only the lands and wildlife that are protected but also natural
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processes like forest fires, beetle outbreaks, and the progression of plant life from colonizing wildflowers to ancient forests.

The diversity of ecosystems represented in our wilderness system turns out to be an important consideration. In assessing the need to recommend candidate areas for wilderness protection, the U.S. Forest Service considers “an area’s ability to provide for preservation of identifiable landform types and ecosystems” as one of six key factors. According to Forest Service policy, “This approach is helpful from the standpoint of rounding out the National Wilderness Preservation System.” The Bureau of Land Management (BLM), which oversees most of the federally owned desert lands in the western United States, has also recognized the goal of “expanding the diversity of natural systems and features, as represented by ecosystems and landforms.”

In 1992, the international Convention on Biological Diversity (CBD) was drafted to help world leaders address the global crisis regarding extinction of rare wildlife and disappearance of imperiled natural habitats. The United States became one of 168 signatory countries endorsing this treaty in 1993, but the Senate has yet to ratify the agreement. Target 11 of the CBD recommends that overall, 17 percent of lands and inland waters and 10 percent of coastal and marine habitats be located in protected areas such as wilderness, with at least 10 percent protected in each ecological region of the world. As the accompanying bar chart (below) and map (next page) show, some regions already meet the protected area targets, while other regions have a long way to go. In this country, congresionally designated wilderness is one of the primary types of protected area, and new designations could help regions like the Great Plains, Midwest, South, and East Coast meet targets for protecting native ecosystems.

Most American children grow up singing the song, “America the Beautiful.” This song extolls “purple mountains’ majesty,” suggesting aesthetic appreciation as an important use, above “fruited plains,” conjuring up agricultural productivity as the primary value.

Worldwide, grasslands are the most imperiled ecosystem, stressed by farming and heavy livestock grazing. In North America, our tallgrass prairies have been so comprehensively converted to cropland that few remnants remain. As a result, there currently are 55 species of grassland plants and wildlife that are listed as threatened or endangered.

Grasslands tend to occur on lands with deep, rich soils and abundant rainfall, making them ideal for conversion to farming. Very little of the tallgrass prairie escaped the efforts of sodbusters and homesteaders in the 1800s and those who followed in their footsteps. As a result, prairie specialists like the Poweshiek
skippering butterfly, black-tailed prairie dog, American bison, and black-footed ferret occupy small fractions of their original native habitat and have become increasingly rare. Consistent with worldwide trends, low-elevation grasslands in the United States have the lowest percentage of lands falling within protected areas of any kind. This represents an opportunity to expand and strengthen our wilderness system.

As one travels farther west on the Great Plains, the climate becomes more arid and farmland gives way to cattle ranches. Here, on the short-grass and mixed-grass prairies, many of the private lands that were homesteaded during a period of unusually abundant rainfall in the late 1800s were abandoned by farmers when these lands returned to a more normal cycle of drought, and many of these lands were relinquished back to the federal government to become the National Grasslands of today. Thanks to the federal Roadless Rule, potential wilderness areas on National Grasslands have been identified, and might one day join the system of designated wilderness.

Other natural ecosystems, like high-desert sagebrush steppes, still have an abundance of land that qualifies for wilderness designation. Yet sagebrush is sparsely represented in the national wilderness system. Some of the BLM’s most outstanding potential wilderness areas, from Adobe Town in Wyoming to Colorado’s South Shale Ridge and the Owyhee Canyonlands of Oregon all represent sagebrush ecosystems. In 2003, a team of scientists led by Steve Knick of the USGS determined that less than 3 percent of sagebrush habitats on federal lands were protected in reserves. The sagebrush sea is presently home to some of America’s most intact remaining ecosystems, with most of the original native wildlife in abundance. The potential listing of the greater sage grouse as an endangered species has inspired new efforts to protect sagebrush habitats, including wilderness protection. Conversion of wild places to domesticated landscapes has been going on in North America for 400 years, while wilderness designation through an act of Congress arrived only in 1964. One of the primary criteria for creating a wilderness is that lands be predominantly natural with relatively insignificant human influence, so much of the United States did not qualify for wilderness protection by the time the Wilderness Act became law. For centuries, agriculture, mining, rural settlement, and logging had converted natural areas into human-dominated landscapes, subtracting vast areas from wilderness consideration. Consequently, wilderness has been cobbled together over the years from the lands that nobody wanted for economic development.
But the scars of human activity heal over time, and lands once heavily affected by industry and commerce have returned to a wild state, thus becoming wilderness candidates. Much of the hardwood forest of the Eastern United States is “second growth” that arose from abandoned farmsteads or heavily logged woodlots, and some of these have become protected as wilderness. In the mountains of Colorado, ranges riddled with mineshafts, logged off, with major county roads blasted into the mountainsides gradually returned to a natural state and were designated for wilderness protection. The Maroon Bells-Snowmass Wilderness is a prime example, receiving thousands of visitors each year who enjoy breathtaking views, alpine meadows carpeted with wildflowers, and the chance to stumble upon abandoned mining machinery that over time have become historical relics. Some ecosystems, like the Eastern hardwood forests, have only become available as potential wilderness after the scars of human strivings have healed.

Despite the challenges, Americans have a diversity of wilderness to celebrate. Coastal ecosystems are represented by designated wilderness in the Florida Keys, the Oregon Islands Wilderness, and the Aleutian Islands of Alaska, all managed by the U.S. Fish and Wildlife Service. Portions of the Arctic tundra have been designated as wilderness within the Arctic National Wildlife Refuge. Arizona has an abundance of wilderness in the Sonoran Desert, where giant cacti rise amid forests of dwarfed, leafless trees. The Boundary Waters Canoe Area Wilderness features a vast network of lakes, rivers, and wetlands linked by canoe paths and sprinkled with innumerable rocky islets crowned with taiga forest. The Okefenokee Swamp of Georgia showcases magnificent old-growth mangrove trees at their wildest, while New Jersey’s Great Swamp National Wildlife Refuge preserves ecologically important wetlands and hardwood forests in the shadow of New York City.

There are those who are attracted to wildness for its own sake, who seek the authenticity of the original native vegetation, the thrill of spotting a rare species of wildlife, the sense of experiencing the landscape in its original form as the first human explorers might have discovered it. These are the lovers of wilderness. And perhaps there is a little of this yearning for wildness in each of us. With foresight, one day there will be a wilderness for every ecosystem in America, where visitors can experience each unique community of life in its primeval state.

Erik Molvar is a wildlife biologist with WildEarth Guardians, a nonprofit environmental group, and is the author of 17 books featuring potential and designated wilderness.
A
early criticism of the system of wilderness areas in the United States was that most of them were just “rocks and ice,” high upland areas that were scenic, certainly, but also distant, inaccessible, and largely devoid of fish and wildlife. It’s true that there are plenty of snow-capped peaks and remote deserts in the wilderness system, and that the system would benefit from a greater emphasis on biodiversity conservation. But, in fact, among the first ancestors of the modern wilderness system in the United States is a small patch in Florida set aside by President Theodore Roosevelt to protect birds. For every vast landscape of mountains and desert, there are smaller treasures like the Joyce Kilmer-Slickrock Wilderness on the border of Tennessee and North Carolina, a haven for the remarkably diverse plants and animals of southern Appalachia.

But, all that said, we shouldn’t be too hasty in writing off the value of those expanses of rocks and ice protected by the wilderness system. In fact, they are an integral part of the solution to perhaps the most important environmental and economic challenge facing the United States today: water scarcity in an age of rapid climate change.

In 2014, California suffered what many called the worst drought in living memory. In recent years, farmers, ranchers, and municipal officials from Los Angeles to Denver have been watching nervously as the waters in the great reservoirs of the Colorado River have fallen to historically low levels. New Mexico and West Texas have been suffering drought with little relief since 2002. Parts of the United States with little experience in water scarcity are feeling the pinch: a drought in the Southeast in the mid-2000s threatened the water supply of metropolitan Atlanta and triggered a fight for water resources that still rages among Georgia, Alabama, and Florida. A recent study by Columbia University concluded that metropolitan areas and major agricultural regions across the country could be facing serious water scarcity in the near future.¹

Where will the water come from that we need to secure our future? Part of the answer lies in our country’s wilderness areas and other wild public lands. Two-thirds of the water used in the United States today comes from rivers, and there is no better and more economical way to preserve...
rivers as a source of clean, plentiful water than to protect their flow and quality on public land. More than half of the U.S. population’s drinking water supply flows through and out of the country’s 650 million acres of forest. The cities of New York, Boston, Denver, and Portland are among the many communities across the country investing billions of dollars in land protection in order to save billions more in drinking water supply and treatment costs. The U.S. Forest Service’s Forest to Faucets project promotes partnerships between federal and local governments and private actors to promote watershed health through forest conservation.

The headwaters streams and wetlands found in high uplands – areas often protected by wilderness designations – are natural nurseries for rivers, vitally important for maintaining flow and quality downstream. A study by the U.S. Geological Survey (USGS) found that headwater streams in the Northeastern United States contribute up to 55 percent of the mean annual flow to larger rivers downstream. Wetlands play an important role in recharging groundwater, which, in turn, is vitally important to river flows. USGS found that, on average, 40 to 50 percent of a given river or stream’s flow comes from groundwater.
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The authors of the Wilderness Act of 1964 recognized the role of wilderness in gathering, cleaning, and delivering water for people and nature. In congressional debate, Sen. Frank Church, D-Idaho, declared that setting aside wilderness was important not only for the preservation and enjoyment of nature, but for “wise watershed conservation” as well. The wilderness in Idaho that bears his name – the Frank Church-River of No Return Wilderness is the second-largest wilderness area in the lower 48 – nurtures and protects the upper reaches of the Salmon and Selway rivers.

In fact, some of our country’s greatest rivers rise in wilderness areas. Anyone who has picked up a newspaper in the past two years has likely seen a story about the drought-stricken, over-allocated Colorado River, perhaps the most visible poster child for water scarcity in the West. A big part of the eventual solution to the crisis in the Colorado basin depends on protecting the flows of the river’s relatively intact tributaries. The biggest one, the Green River, is born in the Bridger Wilderness Area in Wyoming. Others – the Yampa, the White – rise in the Flat Tops Wilderness Area in the state of Colorado. The Rio Grande, another heavily exploited river plagued by drought, rises in the Handies Peak Wilderness Study Area in Colorado. The Hudson River, flowing through the heart and history of New York state, has its beginning in the High Peaks Wilderness Area, a wilderness created under state law. In 2009, the Owens River Headwaters Wilderness was created in large part to protect the flow and quality of the Owens River, another major source of water for the Los Angeles metropolitan area.

Rivers less well known but just as important to the human and natural communities that depend on them are reared in wilderness areas: the Mokelumne and Kern in California; the McKenzie, Chetco, and Salmon (a different one) in Oregon; the Gila in New Mexico; the Gros Ventre in Wyoming; the Pine in Wisconsin; the Buffalo in Arkansas; the Ocklawaha and Withlacoochee in Florida; and countless other rivers and streams across the country.

Wilderness areas, including those once-maligned expanses of rock and ice, are where rivers are born. Like the rivers they spawn, wilderness areas offer us scenic beauty, recreational benefits, and the opportunity to uplift and enrich our spirits. As climate change alters the rules by which rainfall, snowmelt, and river flows have behaved for thousands of years, we’re forced to be smarter and more creative in our management of water resources than we have ever been before. Wilderness preservation and its legislative cousin, Wild and Scenic River designations, will take on even more tangible and important value, protecting the wellsprings of our most important natural resource. Though the authors of the Wilderness Act of 1964 likely didn’t see clearly the challenge of climate change coming, they presciently provided us with an important tool to meet it.

Christopher E. Williams is senior vice president for conservation at American Rivers.

The United States was settled from east to west, beginning at a time when most saw the natural world as a resource for survival and profit. When the Wilderness Act of 1964 became law more than 350 years after the first English settlers arrived at Jamestown, there weren’t many public lands remaining east of the Mississippi River, let alone lands that hadn’t been scarred, in some way, by human activity.

And yet the U.S. Forest Service had designated three wild areas – New Hampshire’s Great Gulf, and North Carolina’s Shining Rock and Linville Gorge areas – as wilderness before 1964, and the Wilderness Act made these three the first federally designated wilderness areas in the East.

The ideas that had led, finally, to passage of the Wilderness Act were cultivated among people alarmed by vanishing forests in the eastern United States. Many of the wilderness movement’s historical milestones – including the Transcendentalists’ re-focus on nature; New York state’s first designation of lands to be kept “forever wild” in the Adirondacks; John Muir’s 1,000-mile hike to the Gulf of Mexico; and Vermonter George Perkins Marsh’s introduction of the idea of sustainability – happened in the East, and it was in the Adirondacks that one of the wilderness movement’s most influential thinkers, Bob Marshall, spent much of his youth pondering the fate of America’s wild lands.

The language of the Wilderness Act was carefully crafted by Howard Zahniser. As his son, Ed, points out today, he meant for his description of wilderness as an area “untrammeled by man” to be interpreted precisely, using the dictionary definition of “untrammeled” as unhindered or unconstrained by human development. The act went on to describe wilderness as “an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation” with “outstanding opportunities for solitude or a primitive and unconfined type of recreation” that may also contain “ecological, geological, or other features of scientific, educational, scenic, or historical value.”

Soon after the law’s passage, however, it became clear that the Forest Service – custodian of the vast majority of public lands in the East, with the responsibility to propose areas to Congress for designation as wilderness – was adhering to a stricter interpretation of Zahniser’s words than he had intended, including, apparently, a new definition of “untrammeled” to mean “untouched.” Man’s imprint was virtually everywhere in the East, and in the opinion of Forest Service leaders, any sign of human activity – roads, settlement, farming, or logging – disqualified an area from consideration as wilderness.

In the years following passage of the Wilderness Act, however, as Eastern populations continued to grow and become more mobile, people began to demand that the mechanisms established by the law be used to provide more...
recreational opportunities near Eastern cities. Their patience with the Forest Service’s “purity doctrine” was wearing thin.

**Challenging the “Purity Doctrine”**

Critics of the Forest Service's decision-making, including many colleagues of the late Zahniser, asserted that the Act’s definition of wilderness was the statement of an ideal, not a practical guideline; to believe otherwise would be to think Zahniser and the bill's supporters hadn’t wanted any wilderness areas in the East – but they knew and appreciated, as well as anyone, the regenerative capacity of wilderness.

The Forest Service’s “purity doctrine” was an outlier; the other federal land management agencies with the authority to recommend wilderness areas had adopted a more open interpretation of the law. In 1968, Congress, acting on the proposal of the U.S. Fish and Wildlife Service, designated the eastern half of New Jersey’s Great Swamp National Wildlife Refuge – which had a road running through it at the time of designation that was later reclaimed and became part of the wilderness – as a federal wilderness area; in the early 1970s, the National Park Service proposed that more than 75,000 backcountry acres in Shenandoah National Park be designated wilderness. All the lands within those areas had been farmed or inhabited but had returned to a wild state as years had passed. By contrast, the Forest Service, in 1970, had opposed congressional designation of new wilderness in West Virginia on the grounds that the lands had been logged decades earlier.

Environmentalists and public interest groups charged that the Forest Service’s policy wasn’t about purity at all – it was about turf. Doug Scott, a wilderness advocate and historian who began his career as a congressional representative for the Wilderness Society in 1968, recalls the prevailing skepticism: “No bureaucrat wants to give up his maximum discretion,” he said. “That’s why the director of the Park Service and the chief of the Forest Service were the strongest opponents of the Wilderness Act before the Kennedy administration, when they were forced to go along. They just hated the...
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idea of losing their discretion – and their discretion included moving the lines whenever they wanted to, in order to chop something down. Well, that was exactly the principal reason for the Wilderness Act, because in both the parks and in the forests, the lines kept moving.”

Scott and several colleagues – notably the redoubtable Ernest Dickerman, remembered today as the “Grandfather of Eastern Wilderness” – began drafting legislation that would compel the application of the Wilderness Act’s provisions to lands in the East.

As the debate heated up, the Forest Service’s purity doctrine was forced into the open. In 1971, Associate Chief John McGuire, speaking to the Sierra Club’s Biennial Wilderness Conference in Washington, D.C., said that “areas with wilderness characteristics as defined in the Wilderness Act are virtually all in the West.” Dickerman, recalled Scott, was astounded: “He came running back to me just shaking with rage. He was wagging his finger and saying: ‘Did you hear what that man said?’”

To most environmentalists, it was the moment when the fight for Eastern wilderness really began. In the face of mounting public disapproval, the Forest Service floated its own legislative proposal for designating Eastern wilderness – which was essentially a codification of the purity doctrine. Scott promptly finalized his own legislation, and won the support of Sens. Frank Church, D-Idaho; Henry Jackson, D-Wash.; and James Buckley, R-N.Y. In the House of Representatives, the bill was initially championed by John Saylor, R-Pa., one of the Wilderness Act’s primary sponsors.

Passage of the bill was delayed by the Watergate scandal, and the Forest Service floated its own legislative proposal for designating Eastern wilderness – which was essentially a codification of the purity doctrine. Scott promptly finalized his own legislation, and won the support of Sens. Frank Church, D-Idaho; Henry Jackson, D-Wash.; and James Buckley, R-N.Y. In the House of Representatives, the bill was initially championed by John Saylor, R-Pa., one of the Wilderness Act’s primary sponsors.

The new law also designated 16 new wilderness areas, mostly in the Southeastern United States, including the 15,000-acre Joyce Kilmer-Slickrock Wilderness in North Carolina and Tennessee; the 12,000-acre Sipsey Wilderness in Alabama; and the 22,000-acre Bradwell Bay Wilderness in the Florida Panhandle. Congress also designated, in Section 4 of the new law, 17 wilderness study areas, to be managed in such a way as to protect their value as wilderness until Congress could decide their future. Notably, some of the newly designated areas had previously been logged, but had returned to a wild state over the years.

While these new areas generated much excitement, Scott points out that they weren’t really the point of his legislation. “The whole purpose of the Eastern Wilderness Areas Act,” he said, “wasn’t to protect additional areas. That was just gravy. It was to focus like a spotlight on this misbehavior by the Forest Service, and to get the Congress to fix it.”

The end of the purity doctrine ushered in a new wave of wilderness designations in the East – and today, though 95 percent of the more than 109 million acres in the NWPS are west of the Mississippi River, the number and size of Eastern wilderness areas have steadily increased. The Appalachian National Scenic Trail, first opened in 1923, now extends about 2,200 miles from Georgia to Maine, much of it traversing 25 federally designated wilderness areas.

A significant portion of the wilderness added to the NWPS by Congress since 1975 has been in the Northeast – including 34,500 acres in New Hampshire’s White Mountain National Forest and 42,000 acres in Vermont’s Green Mountain National Forest (GMNF) added by the New England Wilderness Act of 2006. More than one-fourth of the GMNF is now protected as wilderness, compared to a little more than 18 percent of national forest system lands nationally – many of them lands once used, perhaps even abused, but now wild again.

Craig Collins is a veteran freelance writer and a regular Faircount Media Group contributor who has almost 20 years of experience reporting about government, the military, health care, and the sciences.
The Bureau of Land Management (BLM) manages more land than any other federal agency (approximately 250 million acres or 42 percent of federal lands) yet has the fewest acres designated to wilderness (8.7 million acres or 7 percent of acreage within the National Wilderness Preservation System). BLM lands contain a preponderance of desert landscapes, which has arguably added to the agency’s challenges for identifying and protecting wilderness-quality lands.

As the last federal agency to get an organic act (the Federal Land Policy and Management Act of 1976 – FLPMA1), the BLM was not subjected to the Wilderness Act or proactive obligations to identify and manage potential wilderness until 1976. And it was not until 2009 that BLM’s National Landscape Conservation System, which encompasses designated wilderness and Wilderness Study Areas (WSAs), as well as other protected BLM lands, was formally established through legislation.2

Of the relatively minor percentage of wilderness-quality lands managed by the BLM, a small amount is on desert lands. However, the agency’s recognition and protection of desert wilderness continues to evolve.

Delays and Setbacks in Managing BLM’s Desert Wilderness

Wilderness – BLM misses the first round

As we celebrate the 50th anniversary of the Wilderness Act, we must remember that the majority of U.S. public lands were initially excluded from review and designation as wilderness areas under the Act. BLM managed about 66 percent of the federal public estate when the Wilderness Act passed in 1964, but did not officially manage designated wilderness until 12 years later.

BLM was not left out of the 1964 Wilderness Act because the desert public lands were thought unworthy. The principal architect of the Wilderness Act, Howard Zahniser, had BLM lands in mind for inclusion in the Wilderness Act from the beginning; several early drafts of the bill mentioned “other public lands.”3

Shortly after helping to establish The Wilderness Society in 1935, Bob Marshall produced a map of the “Largest Roadless Areas in the United States,” dividing the areas by “forest areas” and “desert areas.”4 Marshall found substantially more acreage for desert lands. Robert Sterling Yard, another founder of The Wilderness Society, wrote in 1926 that “there are other wildernesses than those in the National Parks and Forests. In the Public Lands, which still have greater area than the National Forests, will be found wilderness regions of charm and beauty.”5

In the end, it is generally agreed that the politics of the day made it unacceptable to include BLM in the 1964 bill. As BLM scholar James Skillen puts it, “such an amendment would almost certainly have killed the wilderness bill.”6

Getting left out of the Wilderness Act may have had some benefits. As stated by then-BLM Director Cy Jamison at a conference celebrating the 25th anniversary of the Act in 1989:

Although getting such a late start in the wilderness process may seem to be a disadvantage, in many ways it has proven to be a blessing. It allowed us to learn from our sister agencies, benefit from their mistakes and successes; then design better approaches to fulfilling this mandate from Congress. The main lesson we learned was to fully involve the public – including special interest groups – throughout the wilderness study process.7

A kit fox in the Carrizo Plain National Monument in California. While planning management of this area, the Bureau of Land Management received comments alerting it to the need to protect the plain’s desert grasslands, and in response it identified 13,000 acres of such landscape for protection.
BLM joins the wilderness effort

During his 1959-1973 tenure as chairman of the House Interior and Insular Affairs Committee, Colorado Congressman Wayne Aspinall vowed to delay any wilderness bill unless a Public Land Law Review Commission was created to evaluate and make recommendations on the hundreds of laws governing the management of federal public lands. The commission was created shortly after the Wilderness Act passed. On the same day that the commission was created, Congress gave BLM temporary authority to either classify BLM lands for retention and multiple use management or for disposal out of the federal estate. “Wilderness preservation” was listed among the many uses enumerated in the Classification and Multiple Use Act and BLM created its first “primitive areas.”

As the Classification and Multiple Use Act was expiring, the Public Land Law Review Commission published its final report and recommendations in 1970 titled, “One Third of the Nation's Land.” This important report provided the foundation for debate over the BLM’s “organic act,” which became FLPMA. With this legislation, BLM joined its sibling federal agencies in the awesome responsibility of identifying, managing, and recommending areas for designation as wilderness by Congress.

Wilderness Study Areas – and then no more

Pursuant to Section 603 of FLPMA, the BLM was directed to inventory its roadless areas to identify those that met the criteria for designation under the Wilderness Act, then designate WSAs. Wilderness characteristics are generally defined as: 5,000 roadless acres, naturalness, and outstanding opportunities for solitude or primitive and unconfined types of recreation. WSAs may also exhibit supplemental values that are ecological, geological, educational, historical, scientific, or scenic. BLM completed initial assessments and designations of WSAs in 1980, including recommendations as to whether WSAs were suitable for wilderness designation by Congress. Until Congress makes a final determination, BLM manages WSAs to preserve their suitability for wilderness designation. Subsequent to the initial inventory, BLM continued to inventory lands for wilderness characteristics and designate WSAs pursuant to its general land management authority, under FLPMA Section 202. Through the authority given to BLM in sections 603 and 202 of the FLPMA, it designated a small number of desert landscapes and recommended even fewer of these as suitable for congressional action.

In 2003, former Interior Secretary Gale Norton entered into a settlement agreement with the state of Utah in which the Interior Department took the novel legal position (inconsistent with that of every prior administration) that BLM actually lacked authority to designate new WSAs. This settlement dramatically curtailed BLM’s authority to protect wilderness-quality lands; and the lack of commitment to identifying and protecting lands that meet the criteria for wilderness designation set additional obstacles to identifying and protecting wilderness-quality lands.

Current policy – lands with wilderness characteristics get a fairer chance at protection

First issued as interim guidance in 2011 and then as manuals in March 2012, BLM now has specific guidance on inventorying lands for wilderness characteristics and factors to consider in deciding if and how to manage lands to protect their wilderness characteristics. Wilderness characteristics are defined in a manner consistent with the Wilderness Act and WSAs. The BLM's current guidance confirms that “managing the wilderness resource is part of the BLM's multiple use mission” and directs BLM to “conduct and maintain inventories regarding the presence or absence of wilderness characteristics, and to consider identified lands with wilderness characteristics in land use plans and when analyzing projects.” Under this new guidance, BLM has been identifying millions of acres with wilderness characteristics and considering options for their management. However, there continue to be difficulties in acknowledgment and commitment to protect these lands, especially in the desert. For desert landscapes, challenges have often related to findings that lack of mountains or extreme topography somehow precludes outstanding experiences of solitude or primitive, unconfined recreation.
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Deserving Wilderness-quality BLM Lands – A Sampling

Wilderness areas
Home to the renowned sandstone formation known as “The Wave,” the Paria Canyon-Vermilion Cliffs Wilderness encompasses approximately 110,000 acres just north of the Grand Canyon in northern Arizona. One of BLM’s first “primitive areas” designated under the Classification and Multiple Use Act of 1964, it became an “Instant Study Area” when FLPMA was passed in 1976 and was established as a wilderness area in the Arizona Wilderness Act of 1984.

In 2009, Congress designated 14 new BLM wilderness areas in the southwestern corner of Utah, comprising 129,000 acres in Washington County. The same law also created two National Conservation Areas and about 19 miles of Wild and Scenic Rivers, all managed by the BLM in the National Landscape Conservation System. These areas are connected to or near the breathtaking vistas of Zion National Park, and provide important wildlife habitat and backcountry recreation opportunities near the Dixie National Forest.

Additional areas with wilderness characteristics that can and should be protected
The Chamisa and Ignacio Chavez WSAs in central New Mexico include rugged topography and cinder cones, with both arid lands at lower elevations and piñon and ponderosa pines at higher elevations. In addition to their interesting scenery and remote feeling, these WSAs provide habitat for elk and mule deer. The Continental Divide Trail passes through, emphasizing the outstanding recreation opportunities. Together, these WSAs encompass more than 50,000 acres, the majority of which BLM recommended as suitable for wilderness designation. BLM’s appreciation of these landscapes in New Mexico is encouraging and sends a strong message to the public and Congress about their value.

The Adobe Town WSA in southwestern Wyoming encompasses almost 86,000 acres of pinnacles and cliffs up to 500 feet tall stretching for miles. It is surrounded by badlands, which embody the definition of roadless, natural areas and outstanding opportunities for solitude and primitive recreation, while providing home to raptors and pronghorn. However, BLM has recommended less than 11,000 acres as suitable for wilderness designation, limiting the recommendation to portions of the ravine and denying the suitability of the remaining landscape. Citizens have identified and advocated for protection of additional lands surrounding the WSA. BLM has now acknowledged significant acreage outside the WSA as having wilderness characteristics, but has yet to commit to protecting them.

In planning for management of the Carrizo Plain National Monument in California, BLM received comments emphasizing the importance of representing the wilderness values of the plain’s desert grasslands. In response, the agency revisited its original inventory, identified two additional areas, and is managing more than 13,000 acres of the valley floor to protect wilderness characteristics. In this instance, when alerted to the need to acknowledge desert wilderness, BLM embraced it.

Conclusion
The BLM experience with wilderness is a coming-of-age story about an agency that was late to receive the responsibilities of its sibling agencies. As a result, BLM remains the public land management agency with the most potential for wilderness conservation. As BLM continues to embrace its conservation mission and to hear from citizens who believe in the value of these desert landscapes, the agency can avail itself of the many opportunities to identify and safeguard its desert wilderness.

Nada Culver is senior counsel and director and Phil Hanceford is assistant director of the BLM Action Center at The Wilderness Society. The BLM Action Center works to protect wilderness values on our public lands, including millions of acres in the desert.
THE HEALING EFFECT OF WILDERNESS

BY STACY BARE

W

ithout wilderness and the wild and open spaces of our country, I would be dead. Coming home from a combat tour in Iraq to a country that did not seem to have made any sacrifices for a war – senior government officials could not clearly identify or agree on its purpose – I was adrift. The early euphoria of being home safe and sound was made hazy by well-intentioned welcome home parties and free drinks at bar after bar when random strangers learned I had just come home. Secluded from the rest of the world by friends and family who escorted me from quiet living rooms to happy restaurants, it was not until I entered a grocery store anchoring a large strip mall that I realized just how lost and confused I really felt.

I received an early insight into those feelings in the first hour after returning home. I was able to take a flight a day early following out-processing at Fort Bragg and flew directly to Hartford, Conn., to spend time with my brother and ensure I could attend both a wedding and then a memorial for two friends from Iraq. My brother was late picking me up from the airport because of the change in schedule. I had a weird 15 minutes standing alone on an empty curb at the airport watching the sunset and wondering what I was doing. I had no such feelings in Iraq, not with the men and women who I felt needed me, and whom I needed.

Before the gravity of my confusion could set in, my brother arrived. But that later experience in the grocery store would anger me. Had I really gone to fight so people back home would have the freedom to choose from among endless brands of toothpaste and sugary crap cereal? Freedom of speech glared at me through the eyes of rambunctious, irresponsible demons spawned from pop culture: “I’m with stupid” T-shirts, soap opera digests, and tabloid newspapers. No one was talking of war.

I remember how I watched a kid stare at me as he ate a doughnut he had swiped from the bakery section, his mother oblivious while piling box after box of different kinds of unnaturally colored crackers, cereals, little cakes, and doughnut holes into her shopping cart. I could take no more. I fled from the store to the car and back to my brother’s house. On the way, we passed numerous strip malls with nail parlors, video game stores, and fast-food joints, which, along with the highway, bracketed in acre upon acre.
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of blacktop and mostly empty parking lots. Was this honestly what I had fought for?

I spent that entire night fearful of who I had become: a person who hated the country he had once loved for having at its disposal so many choices of things to consume. The next day my brother and I took a hike along the Connecticut coast. It was a beautiful forested walk with glimpses of the sea to the east. We had stayed mostly in the woods for about 2 miles when we had to pass through a large clearing that provided direct access to a small bay. After the clearing, the trail skirted the forest along a rocky beach. I froze.

In the woods, I felt safe and contained. People moved all around us, but I knew I could react quickly to any attack that might come. Moving into the open and crossing all the other side and down to the water, however, felt incredibly dangerous. I couldn’t see into the woods. I had no idea who or what was in there. In my mind, I was in the middle of an infinite number of fields of fire and had nowhere to take cover; in reality, I was in a state park, not Baghdad. Heart racing, I took a deep breath and walked out into the clearing, skirted the forest, and later went down to the ocean, where we surf casted for stripers or black fish or whatever was in season. We caught no fish. In fact, we didn’t see any fish – or any terrorists or combatants either.

Walking back across the open space, now empty of other visitors, the sun setting and casting long shadows, an idea took root that would germinate a few years later. It wasn’t the nail salons in strip malls or all the cereal boxes I had fought for – it was the country itself. That’s what would sustain me – and my brothers and sisters in arms. It was the country I had to contort, grunt, swear, and work mightily to bring my 6-foot, 8-inch, 270-pound frame through to the top of the trail, I felt the same joy and fear I first felt as a child facing his first large tree to climb. We were far off the trail we had identified on the map. Just like when I climbed that first big tree, I was also nervous that a mistake would leave me decapitated and with arms broken, but on the path to equality, but in the face of nature, all humans are, have been, and always will be on equal footing, because, as community organizer Juan Martinez reminds us, “The trees don’t care what color you are and rain doesn’t have a religion.” Outside, on a trail to the top of a mountain or swimming in the ocean, we receive equal treatment, at least from nature, something that we can’t always claim from each other within our cities and villages. Yet as a nation, we have decided the protection of these places is paramount to who we are as a society. We may not be perfect, but we will ensure we all have access to those places where we can be a step closer to actualizing the ideals of our republic.

Just as Johnson hoped to preserve a glimpse of the world before interstates, suburban sprawl, and extractive industries took everything over, time in the wilderness, for me and for many returning warriors, allows those of us who come home confused, angry, or struggling in one way or another to adjust. In the midst of grappling with the shock of a physical or mental injury or just the challenge of coming home, spending time in wild places gives us a glimpse of who we were before we deployed, and from that glimpse, we have an opportunity to build a positive future.

In the Canyonlands, crawling over a difficult rock scramble that pinched near the top into a narrow chimney where I had to contort, grunt, swear, and work mightily to bring my 6-foot, 8-inch, 270-pound frame through to the top of the trail, I felt the same joy and fear I first felt as a child facing his first large tree to climb. We were far off the trail we had identified on the map. Just like when I climbed that first big tree, I was also nervous that a mistake would leave me decapitated and with arms broken, but

On Sept. 3, 1964, as the full Vietnam Conflict approached and two months after the signing of the Civil Rights Act, then-President Lyndon B. Johnson signed into law the Wilderness Act, creating a legal definition of wilderness in the United States, protecting more than 9 million acres of federal land, and, according to Johnson, ensuring future generations would “… remember us with gratitude rather than contempt [for leaving] them a glimpse of the world as it was in the beginning, not just after we got through with it.”

The Wilderness Act, however, is not simply legislation that creates eco-museums for us to go exploring the history of our natural world. Having places where the rest of nature – and we as humans are indeed a part of nature – reigns supreme over humans allows for the fullest expression of equality. The Civil Rights Act moved our nation forward significantly
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instead, I found myself laughing and high-fiving my brother when we were both safely back on trail following some incredible cuss work to get us both through the chimney. My youth, my joy, had been found anew.

I’ve been reminded of my earlier, joyous self – my pre-deployment, prewar self – in wilderness areas high above the Arctic Circle, on trailheads 45 minutes from my house, in small, forested sections just south of Washington, D.C., and everywhere in between. And I’m not the only veteran with that experience. Stories told by World War II, Korean, Vietnam, Cold, and Gulf War veterans around shared campfires revealed to me that time outdoors showed us all – by reminding us of our past selves willing to see awe in the world – that the coolest, the biggest, the baddest, the toughest things we’ve done in our lives are in front of us or are happening as we struggle uphill, cast flies into pristine waters in hopes of a mythical gigantic trout, or just sit and watch as the sun rises or sets over a distant wild landscape.

In that realization is both release and a connection: a release of the stress and burden of war’s pains and sacrifices as you are forced to focus on the task at hand, and a release, over time, of the stress of feeling that you’re alone, isolated, and that no one can ever understand you; and a connection to the land and your fellow adventurers with whom you’re sharing the journey – even if it is only a journey of the eyes to gaze at a wilderness – that allows for new sacred memories to be formed of that place and with those people.

The release doesn’t mean I don’t still cry for my fallen brothers and sisters, just as the new sacred memories don’t crowd out the positive memories of war or make any less of the sacrifices others made on my behalf. Instead, it provides me another facet for healing and future growth; not only can I rely on the glimpse of a less troubled past, but I can focus on the potentiality of a bright future and the beauty of the present struggle to achieve new goals with new teams, and to have dreams that, before seeing an untamed horizon, I never knew could be dreamt.

There are others – men and women I have met around shared campfires and on crags, or passing by on trails and rivers – that have pains and traumas, feelings of isolation, depression, and hopelessness the root of which I cannot understand, just as they cannot understand my war. And yet, in the sharing of these traumas, conversations about feeling lost in the modern world, isolated from others because of our pains and our confusion – cancer, war, sexual abuse, losing a loved one, losing a job – I have taken strength in the knowledge that by working together, we can conquer mountains, real and metaphorical. I have added a host of positive sacred memories to stand alongside the still sacred but far more frightening memories of losing good friends. These new memories remind me when I’m scared, confused, and claustrophobic in this modern world that there are others who dream of the release in the woods and the freedom of the hills as much as I do. Normally, these reminders are enough to walk me back from the edge of panic and get me planning for the next trip beyond the edge of civilization.

We’re not alone in our trauma, despite our unique experiences of it, and everyone – yes, everyone – needs a little, and most likely a lot, of outside – of wilderness – in their lives.

But when we boil it right down, what is it about wilderness that makes it such an important component of our lives? Why protect it in law?

Is it the comfortable feeling of smallness and contentment you get from peeling off a comforting fleece in a deep canyon as the rays of sunshine reach in to tickle you warm again?

Is it the joyous “YOWP!” yelled at the top of a mountain with friends with whom you’ve struggled together to reach higher than you could ever have alone?

Is it simply staring out into a vista imagining what could be done and what adventures have been won on a particularly feral and wondrous landscape?

Isn’t there great joy in not knowing the answer to the mystery, or, at least, not all of it? Isn’t it worth protecting a place where we can all go to explore our own minds and feelings and thoughts and the bounds of our human bodies? And isn’t it best to go there without the help of anything but our own feet or hands as we paddle or just float down a river?

And isn’t it joy that can help us all overcome the trauma of life?

Yes, there is an argument to be made, a successful one I believe, that wilderness has value simply for being itself, but for many, to understand that, they must first understand that the wilderness has value to us. Wild places have the power to save us, to connect us to a broader community, to help us find our own voice before an all-powerful being or simply to feel the vastness of the universe. These places have value in our own lives and the lives of others, and the Wilderness Act keeps them intact.

Stacy Bare, a climber, skier, and sometimes mountaineer, came home in 2007 from Iraq, where he had been awarded a Bronze Star for merit. He began climbing out of his homecoming challenges in 2009 when a fellow veteran took him out to get vertical for the first time. He is an ambassador for The North Face, a 2014 National Geographic Adventurer of the Year, and works as the director of Sierra Club Outdoors.
In the early 1920s, Aldo Leopold published an article in *Outdoor Life* titled, “A Plea for Wilderness Hunting Grounds.” In his article, Leopold argued for setting aside some public hunting lands as roadless wilderness. He wrote in the article that wild land protection was in fact wildlife habitat preservation – that it was more economical in the long run to leave some public lands roadless for hunting than to develop and build roads across these lands. He further added that traditional and primitive outdoor skills would best be preserved by requiring hunters to use human or horse power to access wilderness. Leopold wrote, “Who shall say that the diamond hitch and tumpline are not as much worth conserving as the black-tail buck or the moose? Who shall say that the opportunity to disappear into trackless wild is not as valuable as...
A pack string on the Continental Divide Trail in the Aldo Leopold Wilderness in New Mexico. Leopold, a conservationist, believed that leaving some lands roadless for hunters encouraged traditional outdoor skills to be preserved.

the opportunity to hang up a trophy? Who shall say that we have not room enough in the huge country to earn a living without destroying the opportunity to enjoy it after it is earned, each after his own taste?"

Leopold's vision for wilderness was inspirational. His efforts to designate part of the Gila National Forest in New Mexico as the world's first wilderness area in 1924 started a movement that created a new philosophy for public land protection. The 558,014 acres of the Aldo Leopold Wilderness and Blue Range Wilderness areas allow regulated hunting in season, but no roads, vehicles, buildings, or logging are permitted. This landmark wilderness designation now celebrates its 90th year, 40 years before the 1964 Wilderness Act was passed by Congress. The Wilderness Act states that "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor and does not remain." This was a major change in attitude from that of America's early pioneers, who regarded wilderness as a foe to be subdued, conquered, and exploited. As an ethical hunter, Leopold also applauded the newly formed Game Protection Association that was part of the new wildlife and public land conservation effort. His vision for the future almost a century ago has made hunting in the American wilderness his legacy.

We have experienced firsthand Leopold's vision for wilderness as wildlife habitat protection, for the positive economic values generated from wilderness, and for the preservation of our human heritage through the use of primitive skills and tools. For more than five decades, we have made the wilderness landscape our life as hikers, hunters, riders, and for 30 years as outfitters in the Shoshone National Forest, the Bridger-Teton National Forest, and in Yellowstone National Park. In addition to relying on wilderness to provide our winter's meat, we consider ourselves to be among the luckiest people in the world to have earned a living by operating a wilderness outfitting business. We were at home with the wilderness as our office. Our tools of trade were saddles, tents, and Dutch ovens. Our commute to work was astride our hardworking horses on wilderness trails of the Greater Yellowstone Ecosystem. Our ceiling at night was the Big Dipper, Orion, and a thousand constellations. The clients with whom we shared the wonder of wilderness often became friends who returned year after year. Often our hunters enjoyed the natural history and beauty of the wilderness so much that they asked to return with their families so that their children could experience the "untrammeled" side of life. That made all the difference to our wilderness outfitting business as we diversified our trips each year.

Today there are many hundreds of wilderness outfitters who owe their livings, just as we did, to wilderness hunting. The communities in which these outfitters live benefit economically from the hunters as well, a sustainable economic benefit that requires only that some public lands remain roadless. Perhaps more important, the pristine wilderness provided elk, deer, bighorn sheep, moose, and other wildlife a permanent home. Grizzly bears, cougars, and wolves were our welcome neighbors. Our lives have been blessed and enriched by wilderness. Leopold's predictions for the economic and ecological value of wilderness wildlife habitat protection and preservation of outdoor skills have come true.

There are many types of hunters: trophy hunters, meat hunters, ethical hunters, bird hunters, big game hunters, new gear and gadget hunters, slob hunters, black market hunters, hunters who always seem to bring home their quarry, and hunters who seldom pull the trigger. We count ourselves among those who may be called wilderness hunters – hunters who need wild, roadless lands in order to have a quality and satisfying hunting experience. For most of our adult life, we have hiked or horsepacked into wilderness for our annual fall big game hunting for many reasons. First, we are at home in the wilderness where we are comfortable camping and hunting far from the sights and sounds of civilization. Second, we like to stalk undisturbed animals while spending time learning how animals live, following their movements and quiet behavior, and stalking slowly into the wind to hone our outdoor skills. A third reason is there is simply less hunting pressure and competition from other hunters in wilderness.

We are who we are today due to wilderness. When we were young, wilderness, nature, and the outdoors were our teachers and shaped our character and beliefs. The wilderness taught us self-reliance and how to live comfortably in the mountains. Some of the lessons we learned were how life works in the wild natural world, how to read weather, and how to lead a pack string of horses on wilderness trails through rough, rocky terrain. Our endurance and strength were tested while summiting towering peaks far above tree line. We learned to view the wild landscape as our home and felt a responsibility to protect wilderness and wildlife.

Aldo Leopold (right) on horseback in the Gila National Forest. The Gila Wilderness, the first wilderness area and part of the Gila National Forest, was designated thanks, in part, to Leopold's efforts.
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for generations to come. We felt a connection with all living things and developed a keen sense of place.

Later, when the call to protect our precious public lands came, we shared this knowledge and experience with our national leaders by lobbying Congress to pass the Wyoming Wilderness bill in 1984. We feel proud to have followed in the footsteps of the early wilderness advocates such as John Muir, Howard Zahniser, Bob Marshall, and the Murie’s. We are privileged to have met such inspiring people as Mardy Murie in that campaign. She acted as a mentor to many of us with her life of promoting wild land ethics and conservation with her husband, Olaus. Unfortunately, many of our elected and appointed officials did not share our love of wild places and did not see the need to protect unroaded lands. They only saw the wilderness as a source of resource extraction. But those who answered the call for protection of public land wilderness have been rewarded with the knowledge that this was the right choice to make for the greater good of the land, its inhabitants, and our country.

As conservationist and author Wallace Stegner wrote, “Something will have gone out of us as a people if we ever let the remaining wilderness be destroyed. ...” In addition to learning wilderness ways and hunting in wild lands, we find that they harbor a spiritualism that is good for the soul. This may be what Stegner referred to as “the geography of hope.” Nowhere is it easier to feel the presence of a power larger than ourselves than to sit quietly in the heart of wilderness and just listen. Often the whisperings we hear sound more like ancient voices than wind in the trees.

While exploring the wilderness on our own or with our guests, we soon realized that we were not the first people to hunt this special country. We discovered many archaeological artifacts and sites where ancient people had lived. Often we would pick out what seemed like the perfect campsite for the night and find artifacts where a prehistoric hunter had long ago flint-knapped an arrowhead near a fire pit. We started thinking about how these people lived and looked at the land. After partnering with professional archaeologists on high altitude research trips, we learned that many cultures had occupied the wilderness lands, from the prairie basins to the high mountains, during the past millennia. Our annual archaeology trips led to new discoveries that expanded our knowledge and appreciation of how valuable natural, healthy wild lands were, and are, to hunters and gatherers. The high altitude prehistoric sites we documented showed that numerous prehistoric cultures followed wildlife migrations in search of seasonal flora and fauna. We learned the uses of so many plants that we often served our guests “prehistoric” meals that we harvested near camp. Many of these hunting areas are as pristine today as they were 10,000 years ago, a fact we appreciate as we follow wildlife migrations each autumn. Leopold, who hunted with bow and arrow, likely would have thought about connecting to prehistoric people through his own use of ancient hunting skills. Today, we hunters who cherish wild lands follow in the moccasin tracks of prehistoric people who went before us. It is a human heritage worth honoring.

When we were young, we were privileged to learn to hunt in the wilderness areas of the Rocky Mountains. Tory hunted with his father and siblings in the Colorado Rockies as a boy. The memories of those early days in the mountains built a strong respect for all things wild. He did not only learn to hunt, but more importantly he learned to share the wilderness
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with all living things. Likewise, Meredith was raised enjoying tender venison steaks and trout her grandfather had hunted and fished. We both felt the responsibility to leave the wilderness untrammeled for others to enjoy. Many years ago Meredith shot her first elk in the Wind River Range wilderness in Wyoming. We had ridden and packed our faithful horses to one of our many favorite hunting areas. Two days of travel through rough and breathtaking mountain scenery put us at camp. There a small, trout-filled stream meandered through a lush, grassy meadow. A red-tailed hawk screeched from the cover of the surrounding lodgepole pine forest. The high peaks above camp were draped in tawny gold and bright red autumn colors. The elk, deer, moose, coyote, and bear sign was everywhere. The scents and sounds of wilderness surrounded us, but we neither saw nor heard anyone else.

One afternoon while hunting, we spotted a small herd of elk feeding in the comfort of a willow-filled draw at treeline. Slowly approaching the herd from below, we quietly worked our way to a position in front of the herd and waited. A six-point herd bull bugled constantly as the feeding elk came into view a hundred yards away. As previously agreed, Meredith took the shot at a dry cow. Winter’s meat. The following morning we paused before loading the elk quarters onto two packhorses and took in the scene. Surrounded by steep, rough mountains that had not changed much since the last ice age, it seemed like we were the only two humans on the planet. We gave thanks to the cow elk for her gift and prayed that these wild elk would always roam their wild home. We are pleased to know that Wyoming now has record numbers of elk, and in 2012, Wyoming hunters harvested the largest number of elk in more than a century of regulated hunting. This is especially impressive in the era following the return of the wolf to the Greater Yellowstone Ecosystem and the northern Rockies, where biodiversity and a sound predator-prey balance has restored the wilderness character.

To us, there is nothing more satisfying than to horsepack to our favorite elk camp each autumn. There, the aspen leaves are turning gold, the grass tawny, the mountain tops white, and the sky crystal-clear blue. We know the elk and wolves will be waiting in the quiet places of wild mountains where they have fattened on lush grasses all summer. We hope the ghost of Aldo Leopold will ride past and look upon our little camp with approval. Decades ago, we realized that we cannot live without wilderness, horses, and wildlife. We recognized that we live for wild places and for each other. Wilderness is the common thread that weaves all these things together. The love of horses, wildlife, wild mountains, and each other is the lifeblood in our veins. May future generations of Americans be as lucky as we are to appreciate the wilderness.

Now, looking back at the past 90 years of wilderness designation in New Mexico, 50 years of wilderness in America, and 30 years in Wyoming, we are grateful to the conservation leaders such as Leopold, Muir, the Muries, Marshall, Zahniser, Stegner, and others who worked hard to protect the valuable asset of wilderness to our country and the world. May we all help carry the wild land torch forward to the next generation of wilderness hunters.

Tory and Meredith Taylor are conservationists who operated natural history and hunting trips as Taylor Outfitters in the Greater Yellowstone Ecosystem for more than 30 years. They continue to lead winter wolf watch trips in Yellowstone since the return of the wolves in 1995.
Valley of Solace, Yosemite Wilderness, Calif.
PHOTO BY WILLIAM PETINO
Sacred Land

The Spiritual Value of Wilderness

Many people – no matter their religious affiliation, if any – find value in wilderness that transcends the material or the physical. The two articles that follow share thoughts on the spiritual value and importance of wilderness from two different perspectives.
Hotel Andaluz, celebrating 75 years in Albuquerque, New Mexico, one of the first hotels of the visionary Conrad Hilton. New Mexico is the home of the first national wilderness due to the tenacity and inspiration of Aldo Leopold. Hotel Andaluz celebrates both men and their unique accomplishments.
Before discussing our spiritual relationship with the wilderness, I think it's worth taking a moment to consider broadly what wilderness is. From a lifestyle entrenched in civilized society, it's easy to conceptualize wilderness as small, confined areas that we visit for small periods of time.

In the bigger picture, of course, exactly the inverse is true. All human civilization is a tiny confined space within wilderness. This is true both geographically and through time. Wilderness is where all people come from and where all civilizations eventually revert to. Though wilderness is, essentially, the universe - life itself - some cultures have attempted to distance themselves from it. These cultures, our cities, our civilized lives, are miniscule blips on the radar of the all-encompassing wilderness.

As an Indigenous person, our spirituality is connected to wilderness in the simple sense that it is connected to reality. We conceptualize our spirituality as the manifestation of our humble and true identity. We, as all human beings, come from the wilderness; we are the human manifestation of the wilderness and carry out a lifestyle that reflects that simple, honest truth. In my mind, for any spirituality to be genuine, it must be connected to the wilderness. To what else could it be connected?

In the same sense that wilderness gives birth to our spirituality, the state of wilderness is also affected by our spiritual practices and the beliefs by which we live. While I don't wish to conflate the world's vast spectrum of human cultures and religions, it is fair to acknowledge that they share some basic principles. There's no tribe, nor major world religion, that expounds the virtues of hatred, greed, and jealousy. Rather, all religions talk about love, reciprocity, humility, honesty, and the like.

Regardless of our denomination, when we talk about how to conduct ourselves as people, how to interact with the world around us, isn't the health and sustainability of our surrounding ecosystem the ultimate measure of our culture's merit? If a spirituality leaves all the world around you – the plants, animals, mountains, rivers, soils, neighboring people – in suffering and ruin, how can that spirituality be a manifestation of love? It is blatantly hypocritical.

Continued on page 97

WILDERNESS AND CHRISTIANITY

NARAWNUN MERTK (UN-THLA-WUN UNTHLAK-UN)

THE MEANING OF WILDERNESS

BY CHAKO CIOCICO

Nearly every faith tradition on Earth has some kind of statement, doctrine, or teaching on the importance of our environment as well as a call to responsibility in caring for the planet. While our understanding of stewardship is through the lens of Christianity, there is wisdom to be culled from many different religions. From Judaism to Islam, and Hinduism to Buddhism, care of creation is, in fact, a universal value, and one that impacts people worldwide.

Wilderness and its importance in the lives of Christians can be traced back to the earliest biblical times. It is difficult to deny the centrality of wild places as their significance is documented in various sacred writings and stories. One cannot read scripture without encountering the importance of deserts, wilderness, and rivers, which serve as important elements in many of the holy stories. Wilderness has been home to such formative events as Moses' call to leadership, the exodus of the Israelites, David's character and reputation, Elijah's prophetic vision, John the Baptist's preparation to herald Christ, and Jesus' testing for ministry. Wild places have also been essential places of refuge, solitude, and spiritual formation. Jesus and his disciples frequently retreated into the wilderness to escape the crowds, to pray, and to renew themselves for ministry. In fact, in the Gospel, whenever Jesus needed to pray or meditate, he did not go to the temple; instead, he went to the wilderness.

Spiritual Significance

As Jesus demonstrated by retreating into the wilderness to pray and reflect, wild places serve as important areas for spiritual practice and renewal. The solitude that wilderness affords is desirable for various spiritual practices like prayer, contemplation, self-examination, reflection, and scripture reading. In the wilderness, heightened physical sensory awareness parallels heightened spiritual awareness. For centuries, wondering at the outstanding beauty of untrammeled nature, beholding God's artistry, and celebrating the intended harmony of God's creation has fostered spiritual revelation and insight.

Countless people claim to feel closer to the Divine while out in Creation instead of in a church building. Wilderness is an incredibly powerful tool for enriching a connection or

Continued on page 99
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at least to us as Indigenous people, for a culture to say, “You should be giving and not greedy,” and then go on to clear-cut entire forests and extinguish the buffalo. Does greed not apply when interacting with plants? Maybe animals don’t count either. That line of reasoning easily goes on to exclude humans of other races, genders, and sexualities. In the end, we are left with a culture that espouses love and kindness but enacts greed and destruction. If a culture actualizes those generally “good” values, it is evidenced in the well-being of all the life with which that culture interacts.

Our interaction with the wilderness is a challenge to make real the supposed values on which our culture and our lives are based. In our language, there is no word to describe “religion”; we simply have our way of life. There is no abstraction: It is the life choices we make that are our true religion. If we hold a respect for life itself, then it is demonstrated in the respectful ways we interact with all its forms.

As eager as I am to assert our social responsibility to wild spaces and make a call-to-action, it is only fair to also acknowledge the plethora of gifts that wilderness offers us in return. As I’ve heard it, the most fundamental meaning to life is to be who you truly are. Be it a plant, animal, culture, or individual person, our purpose is to manifest who we are—a seed growing, a person aging. Unfortunately, this unusual and unnatural form of dominant modern society separates us from that nature. Wilderness is the path home. It is the safe space that doesn’t impose who you are, how you must be, or what you must do. Be it a meditative picnic on a scenic overlook, a backpacking adventure with friends, or a conservation crew carving a trail through the mountains, wilderness simply offers the natural space to revert to your truer self.

The arrogance of dominant society asserts that human beings are, not coincidentally, the superior form of all life. We feel quite the opposite. It is humans who have consistently had trouble living in harmony and balance, and being true to themselves. Hence, Indigenous people look to our plant and animal relatives as our teachers. In our culture there is a saying — “go to the river” — when one is seeking knowledge or needs to re-attain balance. It is our more wild relatives who have these gifts, and if we are patient and receptive, they may bestow them upon us. I hesitate to mention these types of teachings in English, because it always sounds so clichéd and romanticized. While there is a poetic tone in Mvskoke as well, sayings like “go to the river” and listening to the trees and the water are meant as literal instruction.

Wilderness is a spiritual reservoir that we both fill and draw from. It does not distort our true nature, but reveals it. It is not something we control, own, or even know, but something we serve, depend on, and listen to. It is not something that in all our human flaws we managed to create. Rather, it is our purest connection to that which created us.

Anthony Ciocco, or “Chako,” is from the Tokvpvcce Etvlvwv of the Mvskoke people. He is currently working as the Ancestral Lands Program Coordinator for the Southwest Conservation Corps, conducting ecological restoration work across the Navajo Reservation and the Southwest.
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relationship with God because it lacks human distractions. When out in nature, it is merely the Creator and the created commuting together. With this ability and opportunity to be more aware of God's presence, it is easy to understand Jesus' frequent retreats as well as the claim of the Psalmist: “he leads me beside still waters, he restores my soul” (23:2-3). Episcopal priest Reverend Warren Murphy of Wyoming offers a reflection on connecting with God following an outing to his beloved Red Desert:

Living in the midst of this troubled world calls for a dose of heavy medicine. The cure I seek this day is a trip to the wilderness, where I find a refreshing respite from human insanity. This is an opportunity to get back in touch with the Creator. This is a chance to spend a bit of time with the God of all creation. If I listen carefully, I can hear a divine voice in that gentle breeze ... My journey into the wilderness was well worth it. My day in the desert recharged my soul. This is the reason so many people have worked to provide places of wilderness. It is a space for healing and renewal. But I am aware that my “day away” is not an escape. I must return to the human world of failed doings. However, I don't return empty-handed. I carry a dose of the Creator’s peaceful presence back with me.

Beyond cultivating a relationship with God, wilderness also provides an excellent setting for learning about God. St. Paul explains in his letter to the Romans (1:20) that people are without excuse for knowing about God, since God's invisible qualities and divine nature are revealed in what God has created. St. Augustine echoed Paul a few hundred years later, stating:

Some people, in order to discover God, read books. But there is a great book: the very appearance of created things. Look above you! Look below you! Read it. God, whom you want to discover, never wrote that book with ink. Instead, He set before your eyes the things that He had made. Can you ask for a louder voice than that?

Long before the days of conservation and wilderness legislation, the spiritual importance of wild places and the beauty and power of Creation was recognized, emphasized, and respected.

Refuge and Renewal

Time in wilderness can enable visitors to learn about God and how the created world works, but it can also be a place of safety and relaxation. The calming effect that wilderness can have on visitors is an example of how wild places can serve as a refuge. Wilderness in biblical times was often a place of refuge for the persecuted or pursued. Today, we may be more likely to think of wilderness as a refuge from the “modern” world. Wilderness can be a place of Sabbath rest from our trials and labors. It also provides refuge for wildlife and endangered species, preserving critical habitat for God’s creatures to flourish. Protecting these places is protecting a gift beneficial to many.

The healing powers of God’s creation go beyond offering solitude, and can be incredibly therapeutic. Rebecca Barnes, a staff member of the Presbyterian Church (USA), illuminates an example of these healing powers:

During a recent rough spell in my life, I was given a spiritual practice of [lying] flat on the earth (finding any possible patch of grass) for 15 minutes a day. In these moments of embodied prayer and letting go, I felt God’s presence as the earth strengthened my spine, absorbed my sadness into the soil below, and awakened my senses to the beauty around me.

The stories touting Earth's health benefits are plenty, and we have written accounts from many across time. From saints of the wider religious histories like Augustine to environmental icons such as John Muir, one does not have to look very hard to find evidence of the positive spiritual, mental, and emotional health impacts drawn from nature. An entire industry and profession of wilderness therapy has emerged because of the benefits of wilderness experiences. There is truly much to be gained from time spent in wild places.

A Call to Care for Creation

There exist numerous benefits to us from nature, but in our modern day, wilderness does not just happen. Christians have been tasked by God to be stewards of Creation, and among other actions, this includes conserving wild places wherever we can. In an open letter written by 11 clergy and lay members emphasizing the dire situation of our Earth, our failings are highlighted: “To continue to walk the current path of ecological destruction is not only folly; it is sin. We have become un-Creators. Earth is in jeopardy at our hands.”1 In order to rectify careless actions and heal the planet, we must continue to utilize every stewardship tool that we possess, including the ability to create wilderness areas and protect key parts of God's Earth that preserve biological diversity.

We are the keepers, caretakers, and the companions of God's Earth, with responsibilities to the Creator as well as to future generations. Rev. Mari Castellanos of the United Church of Christ, who has a passion for nature and birds, especially in her native Florida, has offered words emphasizing the duality of Divine beauty and hard work:

By the grace of God, the resiliency of nature, and the vision and tenacity of those fighting for protection, some of our most wondrous wild places remain today. We who have been gifted by their efforts to preserve it can do no less than to protect it for generations to come.

Christians and people of faith everywhere should rejoice whenever stewardship of the land occurs. We are called to and can be strong champions for conservation of God's great creation. Conserving and protecting wilderness is fundamental to fulfilling our duty from the Creator. Not only is this a responsibility that we hold, but there are countless benefits to be reaped from wild places. Wilderness is a magical and mystical expression of God the Creator and God the Holy Spirit.

Whether it is a majestic mountain or rolling hills, a spectacular canyon or a powerful river, or a prairie vista that appears to be never-ending, our wilderness areas are mammoth embodiments of God’s power and love. This year, and always, we celebrate the protection of God’s great creation and the spiritual opportunities that wilderness provides.

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1. National Council of Churches Theological Statement on the Environment

Tyler Edgar is the former executive director and Tricia Bruckbauer is the coordinator of Creation Justice Ministries, an ecumenical organization representing the Creation-care policies of 38 Christian denominations and striving to seek justice for God’s planet and God’s people.
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