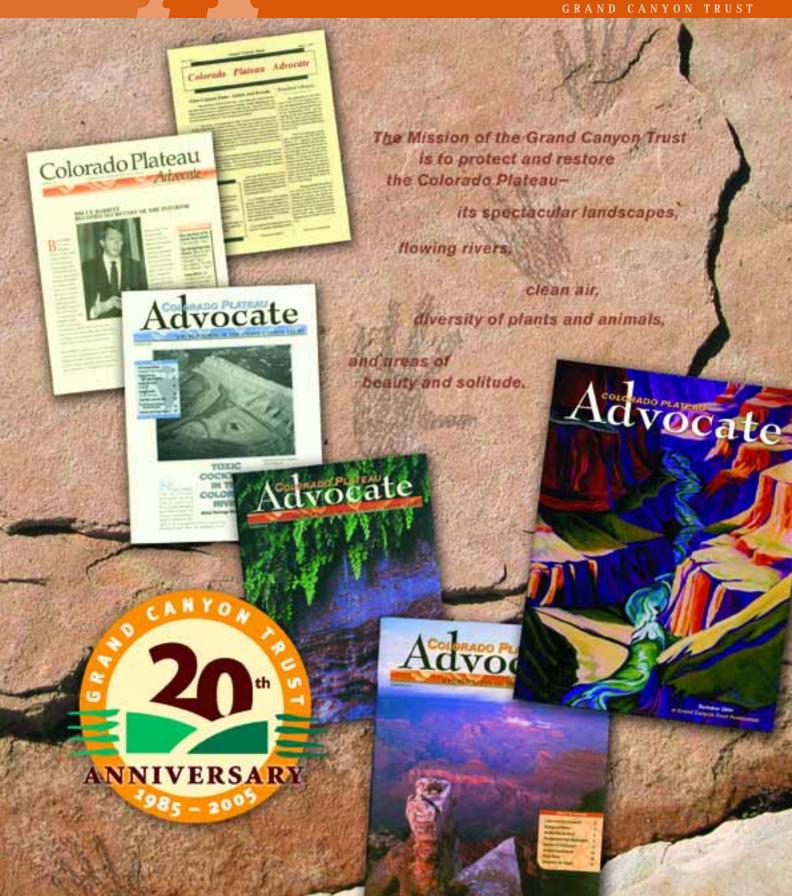
COLORADO IVOCA **PLATEAU**

WINTER 2005



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Looking Forward the Next Twenty Years

by Charles Wilkinson Chair, Board of Trustees

his 20th anniversary edition of the *Colorado Plateau Advocate* offers a welcome opportunity to pause and reflect on the work of the Grand Canyon Trust. As Jim Trees recounts later in this edition, the organization's founders certainly intended that the Trust become an enduring force for conservation at the Grand Canyon and across the Colorado Plateau. But it is a long journey from a dream conceived deep in the canyon to the building of one of the nation's foremost conservation groups. Yet with each passing year, our mission of protecting and restoring the Colorado Plateau for generations to come seems less like an audacious dream and more like a bold work in progress.

I hope you will see the human side of this endeavor. We are a small group that has been blessed with a succession of remarkable leaders who each made indelible contributions to the Trust and the Colorado Plateau. We have asked many of the key figures from our past to contribute articles to this magazine to capture first-hand the stories that dominated our conservation work during their time at the helm. Their recollections are interwoven with articles by our current staff members recounting our roots and contemporary programs.

Most of this *Advocate* is a well-earned retrospective, but I want to use this space to look forward, trying to imagine what the next twenty years might hold for conservation in the canyon country.

We as a people have gained a much greater appreciation for the extraordinary landscape of the Colorado Plateau, but we need to consider a dichotomy. The Plateau has the highest density of national parks and monuments of any place in the world, yet it also has the largest expanse of unprotected wilderness-quality lands in the lower 48 states. So the future will depend on ensuring that the parks and monuments areas are treated like the international treasures they are, with adequate funding and management focused on natural resource protection and restoration. We also must leave a legacy of Wilderness Areas worthy of this place. The Plateau is blessed by an extraordinary diversity of Native American cultures and lands. The tribes contribute strong and authentic voices for better conservation. Conservationists will need to connect more deeply than has yet been done with tribal leaders to address their economic and social equality

needs while seeking common ground on environmental concerns. Resolving these issues of land health and preservation will require that society reach some kind of common understanding on what these sacred lands really mean to us as a people, now and forever.

Today, too many leaders in Washington believe that the Plateau and other remote landscapes should serve as national energy colonies and dumping grounds for wastes. They would sacrifice our rivers, aquifers, springs, animal and plant communities, vistas, and wild lands so that we can postpone our reckoning with a finite earth for a few more decades. A geared-up Interior Department is approving oil, gas, and coal-bed methane leases at a record pace. The drawing boards are covered with plans for new mines, coal-fired power plants, nuclear facilities, transmission lines, and oil shale projects. This rush on the Plateau demands in response tough advocacy, visionary promotion of sustainable alternatives, and the heart and eloquence to speak for the land before it is too late.

The Plateau is dry country. The Colorado River, spectacular as it is, would be called a creek in many parts of the nation, and global warming is expected to diminish it further. Yet, its modest flow is expected to service the needs of 26 million people today—and this is the fastest growing region in the United States. Already more money has been spent controlling and diverting each gallon of its flow for human use than on any other significant river on earth, with disastrous consequences for the living Colorado River. Will we continue to live beyond our means, as suggested by numerous proposals to divert and pipe more nonexistent Colorado River water to more cities? Or will we begin to treat ground and surface water as integrated systems and value sustainable water supplies and the needs of natural systems as imperative priorities of dam management and urban planning?

Finally, we come to the management of our so-called multiple-use lands. Our treatment over the past century and a quarter of these broad, splendid landscapes has hardly given them their due. They have been overgrazed, over-logged, over-roaded, and overrun. Native animal and plant species have been hammered, the forests primed to ignite, the streams silted, and the quiet shattered by machines on the ground and in the air. The coming decades will determine whether our children can enjoy



public lands that offer the same recreation opportunities, the same richness of other creatures, and the same solace that we have been given.

Our expected emphasis on wild lands, water, air, and land health on multiple-use land of course represents a very general formulation. In fact, the Trust already has highly specific and ambitious programs to address these priorities. Undoubtedly those programs will grow and change over time. But I'm confident about one specific fact: the Grand Canyon Trust will be in the thick of making deep progress on these critical issues that will be so essential to the future of the Colorado Plateau.

A Voice for the Plateau by Jim Trees, Founder, First Board Chairman (1985 – 1992)



hen I first arrived on the Colorado Plateau in 1980, I was absolutely astonished by the beauty of its canyons—Grand and small. Here was a land sculpted by the pure hand of God and still—miraculously—unsullied by the grasping and clumsy hands of Man.

As I settled into work on my Springdale farm, I grew increasingly captivated, and concerned. This extraordinary region was facing ominous threats. Growth was exploding in all the surrounding cities and towns. Yet there was no cohesive vision about what the future of these canyon lands could or should be. Nor would cohesion be easy to come by, given the balkanized ownership and governance of land in the sprawling region.

Confronted with this breathtaking beauty on the one hand, and the complexity of governance on the other, the level of environmental debate seemed primitive. Coming from the East Coast, where the fate of an acre or two would generate sophisticated deliberation and concern, I was stunned to find that here, often with the fate of hundreds of thousands of acres of public land at stake, dialogue was basically a shouting match between extremes. In one corner, extractive industries and development interests were quietly manipulating whatever opportunity they could; in the other corner, overmatched, were a small number of dedicated and vocal environmentalists who lacked the resources and credibility to bolster

their position. Debates on issues quickly devolved into polarized positions, with little attempt to seek mutual solutions.

Amid the struggles, I sensed that people living in this region, while conservative in nature, shared my love of these precious lands. Many cared deeply about open spaces, clean air and waters; they enjoyed outdoor recreation and wildlife; they loved the beauty of the land and valued its peace and serenity. They needed a voice, but were leery of extreme politics and the radical images that attached to environmentalists.

The Trust was designed to become that voice. Regional in focus and structure, our ambition was to win the hearts of local leaders and satisfy their minds with trustworthy information in order to protect these precious canyon lands. Occasionally, legal recourse may be required, and often the silent threat of it is essential. Nevertheless, experience has shown me that there is a critical role for such a group—if it is doing its homework, digging deeply into problems, and working collaboratively with imagination and integrity, to find mutually acceptable solutions, many of which were previously unknown.

The notion of a group to protect the Grand Canyon had been percolating among Bruce Babbitt, Harriet Burgess, Huey Johnson and Martin Litton. When Huey Johnson and I first met in the summer of 1984, it was time to move forward and clarify a vision for the Trust. We started lean but powerful. Our first group meetings began that fall, some in my small New York apartment. Working as a Board of Trustees, Bruce, Harriet, Huey and I knitted our views together, and began to bring this vision to life.

Armed with a first-stage mission, a small board, a 501c3, and an elegant brochure crafted from Clarence Dutton's historical illustrations, the Grand Canyon Trust was inaugurated to the public on October 15, 1985 at the American Museum of Natural History in New York. From there, it grew quickly. At our meeting the next day, Bert Fingerhut joined the Board, and six months later, we enlisted Ed Norton as our first executive director.

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Idea of the Trust first arises on Colorado River raft trip

Articles of Incorporation signed by Jim Trees

Trust becomes a 501 (c)(3) organization

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First board meeting, attended by Bruce Babbitt, Harriet Hunt-Burgess, Huey Johnson First fundraising event held at the American Museum of Natural History in New York

Leadership Builds Trust

by Ed Norton, First CEO & President (1986 - 1993)

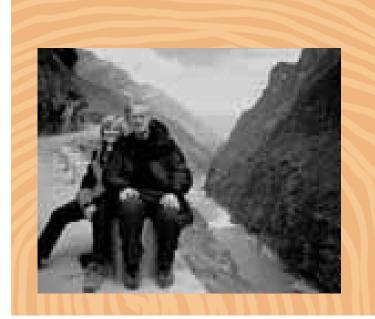
hen Bill Hedden asked me to provide my perspective for the Grand Canyon Trust's 20th Anniversary, I agreed, not because the first seven years are particularly dramatic or that relevant to the future challenges facing the Trust, but rather because Bill's request caused me to focus on some subjects that have been rattling around in my head recently.

I can certainly recount the history of those first seven years at the Grand Canyon Trust. We grappled with defining a role and finding specific issues that added to the sum of conservation in the region rather than being just more of the same. We opened a headquarters office in Flagstaff, recruited staff and began to build a foundation of long term financial support. Local friends like Jim Babbitt, Frances McAllister, and Jean and Bob Wilson nurtured us. Even in those early days we looked forward, wondering how to build an organization with the capacity to address issues that we could not foresee.

We had some success. Congress passed the National Parks Overflights Act banning air tour flights below the rim and requiring an aircraft management plan to restore natural quiet. We reached an agreement with EPA and the owners of the Navajo Power Generating Station to reduce SO2 emissions by 90%. We won a lawsuit against the Western Area Power Administration, and Congress passed the Grand Canyon Protection Act requiring the Bureau of Reclamation to operate Glen Canyon Dam in a manner that protects the downstream environment in the Grand Canyon. We established the Trust's presence with the federal land management agencies and with people like Senator John McCain, who provided leadership on many issues in Washington.

The opportunity to work with the Grand Canyon Trust's Board of Trustees stands out as the most distinctive memory during my seven years. The Trust was blessed, as was I, during these formative years to have trustee leadership that contributed knowledge, experience, passion and commitment, along with generous financial support.

On a personal level, I learned more than I have ever learned at any time during my professional life during



Ed Norton and former GCT board member Anne McBride.

these first seven years with the Grand Canyon Trust. Reflecting back on that time, as I often do, I recall coming out from a hike in southeast Utah's Grand Gulch. It was a Sunday morning, so I stopped in a small church in La Sal. The minister talked about "gifts of the spirit." For me, my seven years with the Grand Canyon Trust was a gift of the spirit.

I am writing this 20th Anniversary perspective from northwest Yunnan Province, China, where I have been working with The Nature Conservancy for the past six years advising the Chinese government on protection of biodiversity and establishing and managing a system of Nature Reserves. Many of the issues are familiar: a proposed large dam in Tiger Leaping Gorge, which is twice as deep as the Grand Canyon; management of the exploding number of visitors who come to these spectacularly beautiful places to experience China's natural and cultural heritage. Many of the issues are different: we have 3.1 million people living in our project area, and every existing and proposed Nature Reserve and protected area has villages and large numbers of people living inside and immediately adjacent to the boundaries.

We work in a very different political context in China. For all of its problems and frustrations, our system in the United States is relatively open and transparent, and we know the locus of decisions and what affects those

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Ed Norton appointed as Chief Executive Officer

Long Range Operating Plan adopted by board

Park Service announces aircraft management plan for Grand Canyon

Glen Canyon Environmental Studies Final Report issued

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Trust opens Washington D.C. office National Parks Overflights Protection Act passed GCT, in partnership with the National Wildlife Federation and the Western River Guides Association files WAPA lawsuit

Trust Brings Breath of Fresh Air to Plateau

by Rick Moore

here is nothing more intimate than our relationship with air. We draw this precious mixture of gases deep into our lungs more than 15,000 times a day. Yet it is also one of the most expansive mediums we experience, as anyone who has stood high on a mountain or mesa and looked across vast distances knows. It can be exhilarating when it is clean, fresh, and cool. It can be demoralizing when it is dirty and smoggy, washing out colors and obscuring the horizon with brownish yellow smudges. Most of the time we take it for granted, living in it and inhaling it without a thought.

But like any other feature of this wonderful planet we inhabit, it is fragile and needs to be cared for, something that the Grand Canyon Trust has been doing for most of its 20-year history.

As early as October 1985, a press release announcing the formation of the Trust quoted a New York Times story asserting the Grand Canyon suffered from "heavy air pollution at least 100 days a year, caused by emissions from smelters and power plants." Within a few years, the Trust joined the fray to clean up the single largest contributor to poor visibility at the Grand Canyon—the Navajo Generating Station.

In 1987, the National Park Service assessed the contribution of Navajo on visibility in the Grand Canyon and found that the plant was the single largest contributor to visibility impairment. In 1990, the EPA proposed a 70% reduction in sulfur dioxide emissions from Navajo. The Trust, Environmental Defense, and the Sierra Club objected, saying that pollution control equipment could reduce sulfur dioxide by as much as 95 percent. In the spring of 1991, Trust president Ed Norton led negotiations with EPA and the owners of Navajo that resulted in a 90 percent reduction. In late 1991, President George H. Bush signed the Navajo Visibility Agreement at the South Rim of the Grand Canyon and sulfur dioxide emissions from Navajo have dropped from 70,000 tons to less than 5,000 tons.

Following that early success, the Trust became involved in the Grand Canyon Visibility Transport Commission, which was mandated by Congress to make recommendations to EPA for reducing regional haze at the Grand Canyon and the other national parks and wilderness areas on the Colorado Plateau. The Trust became involved in the Transport Commission in hopes it would recommend that the Mohave Generating Station—located at the western end of the Grand Canyon—reduce its sulfur dioxide emissions. However, the Commission declined to recommend actions aimed at individual sources such as Mohave, and simply said that a study of Mohave's impact on Grand Canyon visibility should be completed as soon as possible.

With the study bogged down in technical wrangling and political maneuvering, the Trust (and its partner organizations the Sierra Club and National Parks Conservation Association) decided to take direct action, and in December 1997, filed a lawsuit against Mohave for violating the Clean Air Act. In 1999, the plant's owners reached a settlement with the Trust and its partners that requires Mohave to install modern pollution control equipment, which will reduce sulfur dioxide emissions by more than 30,000 tons annually.

In spring 2001, Tucson Electric Power announced plans to add two new 400-megawatt units at its Springerville power plant, located in eastern Arizona, the first new coal-fired units proposed for the Colorado Plateau in many years. A review by the Trust's legal counsel, Reed Zars, found that the existing plant was improperly permitted (a finding supported by EPA) and the Trust filed a lawsuit in November 2001 to bring the plant into compliance. In September 2003, the federal district court dismissed our case. We appealed to the Ninth Circuit and, in September 2004, it reversed the dismissal. While the Springerville lawsuit moved through court, the Trust participated in Arizona Corporation Commission hearings, arguing that need for power from the new units could be met more cheaply and effectively through an aggressive energy efficiency program and that the Commission should factor global warming into its decision regarding the new units. Unfortunately, in November 2002, the Commission rejected the Trust's arguments and authorized the new units. In January 2003, the Trust appealed the decision.

Wayne Owens introduces the Utah BLM Wilderness Act

Secretary Manuel Lujan orders that the Bureau of Reclamation do an EIS on the impact of dam operations on the Colorado River through the Grand Canyon

Jim Ruch hired as Executive Vice-President

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The Trust has been concerned for many years about the massive amount of pollution dumped into the airshed of the Four Corners region. In fact, the San Juan Generating Station anually dumps thousands of tons of sulfur dioxide and nitrogen oxide (and 750 pounds of mercury) into the air. After reviewing the plant's history, the Trust, along with the Sierra Club, filed a lawsuit in May 2002. Two years later the owners of San Juan admitted in federal court that the plant violated its opacity limit 42,008 times. In August 2004, representatives from the Trust and the Sierra Club, the New Mexico Environment Department, and PNM began negotiations to try and resolve the issue.

However, pollution from *existing* coal-fired power plants is not the only threat posed by electricity generation on the Colorado Plateau. During the past few years, a dozen new coal-fired plants have been proposed for construction on or near the Plateau. While these new plants will be significantly cleaner than older plants, they will add to current pollution levels. For the past two years the Trust has been an active member of the Western Clean Energy Campaign, which assists in community organizing, media campaigns, coalition building, as well as providing technical information about coal plants, alternative energy, and regulatory processes.

Degraded air quality and reduced visibility are not the only threats to the Grand Canyon and Colorado Plateau caused by burning fossil fuels. Each year the 18 coal-fired plants on the Colorado Plateau produce 142 million tons of carbon dioxide, a major greenhouse gas that causes global warming. The plants and animals that inhabit this amazingly diverse region are at high risk from global warming because, while species can respond to climate shifts that take place over long periods of time, they will not be able to adequately respond to the rapid shift in climate driven by global warming.

In 2001, the Trust expanded its air quality program to support greenhouse gas regulations, to produce electricity from renewable sources, and to use electricity more efficiently. As part of that undertaking the Trust helped lead a successful effort to convince the Arizona Corporation



Steam plumes rise from Navajo Generating Station.

Commission to adopt a requirement that utilities generate .2 percent of their power from renewable sources by 2001, with the percentage increasing annually until it tops out at 1.1 percent in 2007. In 2004, the Corporation Commission began to consider expanding the requirement, an idea that the Trust strongly supports.

Protecting and restoring the clear, clean air of the Grand Canyon and Colorado Plateau is a daunting task. As the population in the West grows, we must do our best to minimize the air pollution that causes health problems, degrades the spectacular vistas of the places we love so much, and contributes to global warming. Our work on cleaning up power plants is not yet done, nor is our work on renewable energy and energy efficiency—and we simply must begin to manage greenhouse gases. The Trust plans to build on its successes by continuing to be a staunch advocate for clean air at the Grand Canyon and on the Colorado Plateau in the future. We hope you will join us in the effort.

Trust releases report: The Future of the Colorado Plateau: Reconciling Preservation of its Wonders with Economic Opportunity for its Residents

Colorado Plateau Monitoring program launched

Community Initiatives Program established

Retirement Interruptus

by Jim Ruch, Executive VP, Senior Advisor (1989 – 1994)

funny thing happened on my way to retirement. David Getches, with whom I had worked in Colorado, baited a hook and introduced me to Ed Norton. Ed, clearly a graduate of the Teddy Roosevelt School of Public Policy, was too enthusiastic to resist. His vision of a new organization, the Grand Canyon Trust, was simpatico with my conservation philosophy. The next step was meeting with Jim Trees and Bert Fingerhut. And so it began. The first thing we had to decide was where to headquarter the Trust.

Flagstaff may seem the obvious choice today, but at the time a St. George alternative was seriously debated. When Flagstaff was chosen, thanks to the efforts of Jim Babbitt and Frances McAllister, the old homestead house at the Museum of Northern Arizona was offered to the Trust. I moved to Flagstaff and put out the word for an administrative assistant. Fran Joseph fortunately answered, and the Trust was open for business on the Colorado Plateau.

Now what? Ed had been running back and forth between DC and the west hitting the hot spots like a Rottweiler in granny glasses. It was time to establish the Trust as a permanent presence on the Plateau. Thanks to board members Steve Snow, Bill Smart, Norma Mathiesen, Jim Trees, and Bruce Babbitt, the Trust's name recognition developed rapidly. In my first year of traveling around the Plateau I ran into a wide range of reactions. Everyone was impressed by the Trust's Board of Directors. Other reactions ranged from: "Environmentalists go home" (Escalante) to; "Help!" (St. George's small environmentally concerned community) to; "Welcome to Flagstaff" to; "OK so you are a high powered outfit, now, what are you going to do?"

The problem with having an office and a presence was that the phone started ringing and the mail began to pile up. Even with Ed in DC there was lot more to be done than could be done. So the Trust began to build a capable

staff including: Roger Clark, Rick Moore, Evelyn Sawyers, Brad Ack, Tony Skrelunas, and Martha Hahn. But still success was a matter of picking a few priority projects and concentrating our efforts there.

Work on limiting Grand Canyon overflights was already underway and made headway despite the joint efforts of the air tour industry and the FAA. A key step in the overall effort to improve air quality on the Plateau was getting scrubbers installed on Navajo Generating Station. The Trust's participation in the BLM's Resource Management Plan for the Arizona Strip resulted in significant conservation measures being included in that decision, and, of course, the big one was the change in the operation of Glen Canyon Dam to protect and maintain the natural resources of the Colorado River through the Grand Canyon.

Success in these projects demonstrated the effectiveness of the Trust's approach to conservation on the Colorado Plateau. First, sound professional analysis and judgment diligently applied in public decision-making processes. Second, persuasive leadership in bringing together a community of concerned interests. Third, a voice that was listened to and appreciated in the development of legislation and regulation. Fourth, recognition of the formidable legal talent the Trust could and would bring to bear on an issue if it was absolutely necessary.

With all that in place it was time for me to get on with my retirement plans. I had land to clear, trees to plant, and fish to catch. First there was a brief stay in St. George to open a Trust office there thanks to Brooks and June Pace. Tom Jensen came on board to lead the Flagstaff headquarters. When he left to go back to DC, I returned for a short time to help out until Geoff Barnard was hired to lead the Trust to a level of constantly increasing importance in all the matters affecting the extraordinary natural values and wonders of the Colorado Plateau.

EPA proposes a regulation requiring the owners of Navajo to cut emissions by 70 percent, the Trust argues for 95 percent

Kaibab-Paiute Tribe rejects waste incinerator and engages GCT assistance

President Bush visits Grand Canyon to celebrate the agreement to reduce emissions from Navajo by 90 percent First meeting of the Grand Canyon Visibility Transport Commission, Trust argues to include all parks and wilderness areas on Colorado Plateau

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Observatory Mesa, Flagstaff, Arizona.

Community-Based Conservation Brings Success

by Brad Ack, Director of Community Initiatives & Sustainable Economies (1993 – 2003)

remember staring at a map of the Colorado Plateau on the wall of my apartment in Washington D.C., contemplating the wild and mysterious names of the Plateau's wonders: Grand Gulch, Zion, Kaiparowits Plateau, San Rafael Swell, Painted Desert, the Cockscomb. I couldn't believe my luck, soon I would be moving to the Plateau, to take a job as director of the newly minted Community Initiatives Program. I couldn't wait!

Community Initiatives suited me and my philosophy on environmental work perfectly. It was all about the idea

that conservation success begins and ends with the people who make a place their home, that without the active engagement and agreement of those folks, conservation is at best ephemeral, fleeting, someone else's idea, or at worst, an unacceptable imposition. Worse yet if it comes from someone like me, from "back east."

Living up to this Community Initiatives philosophy was challenging over the years. The work often proved to be painstaking, slow, and not prone to the flashy "big win" approach that grabs headlines for a day or two. You continued on page 29

Grand Canyon NP initiates three-year General Management Plan process

Tom Jensen hired as the Chief Operating Officer for Flagstaff office

Trust and partners complete Kaibab-Paiute Comprehensive Economic Plan

St. George office opens

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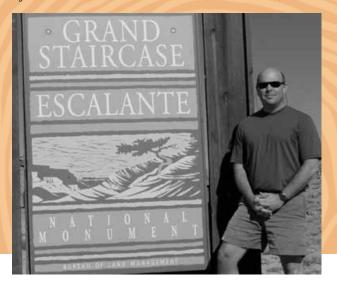
Developers request Tusayan land exchange

for Canyon Forest Village

NAFTA "Trans Canyon Freeway" idea killed

Keeping the Momentum

by Tom Jensen, Executive Director (1992 – 1994)



joined the Trust's staff at an exciting time. Membership was growing, the already-strong board had drawn several very talented new members while also sending many members off to Washington to join the Clinton Administration in senior posts. The Trust's brilliant work in Washington to pass the Grand Canyon Protection Act, clean up the Navajo power plant, and restore natural quiet to the Grand Canyon had put the Trust on the top rung of regional conservation groups. Ed Norton, Roger Clark, Fran Joseph, Julie Gale, and the rest of the staff had built tremendous momentum and everyone's expectations, including mine, were very high.

It was clear that my work would have to be aimed at protecting the Trust's achievements by raising the funds needed to keep the work going. At the same time, we needed to respond to developing threats to the Colorado Plateau from rapid commercial growth at the gateways to Zion, Grand Canyon and other parks. We also had to build the team and tools we'd need to fight efforts to open a coal mine in the heart of the Kaiparowits Plateau and the highway lobby's dream of building a "NAFTA highway" cutting straight through the heart of the Colorado Plateau from Phoenix to Colorado or Utah (the boosters weren't too specific).

The best decisions we made during my time with the Trust were to hire Sarah Bates (now Sarah Van der Wetering) to open the Trust's St. George, Utah office, and second, to develop an analysis (with the help of hydrologist Brad Udall) of the impacts to Lake Powell likely to result from climate change. Sarah single-handedly turned an outpost office into a real powerhouse and the Colorado River managers who dismissed the Trust's forecast of massive drawdowns and vast expanses of silty beaches cannot be quite so dismissive today. In each case, the Trust did what it had always done best: It used good people to assemble solid information on key, strategic issues affecting the future of the Colorado Plateau.

One of my last and strongest memories of service with the Trust was the October 1994 evening when 20 or so Trust staff, board members, donors, and friends (including my son Sam, then 4) found ourselves facing a flash flood on a thin strip of dirt road a few miles north of the proposed Andalex mine site. Our 5-vehicle caravan had just about made it up onto Smoky Mountain, but not quite, when the skies opened and the creek bottom filled with a muddy torrent of soil, trees, and stones that washed away the road ahead and behind us. We all survived, but it didn't have to come out that way. When night fell the sky cleared and there was a moon that lit the wet desert like silver.

I remembered that night when, several years later, I had a role as a White House staff person in deciding where President Clinton ought to establish his first national monument. About a year ago, I came back to the Colorado Plateau for a visit and drove my wife out to the spot on Smoky Hollow road where years before I had contemplated just how dumb an executive director had to be to risk drowning his organization's donors, let alone his beloved son and colleagues. The non-descript bend in the road was still there, smaller and less exposed than I had remembered. And, as had been the case since the beginning of time, there were no mining trucks roaring by. Not one.

Preserving Traces of the Past released

Trust co-hosts Southwest American Indian Tourism Conference National Park Service report to Congress on natural quiet in GCNP released Grand Canyon Symposium, on ecosystem management at Grand Canyon National Park, co-hosted by Trust and NPCA

Protecting Water-Colorado River, Connections, Fragile Beauty

by Nikolai Ramsey

or centuries, Native American societies in the arid Southwest have cherished water as the sacred lifeblood of Mother Earth, a reverence that is also a straightforward acknowledgement of fact in the desert. Today, explosive growth is putting tremendous pressure on the region's water systems, ignoring the historic conservation ethic and the age-old wisdom it embodies.

The Grand Canyon Trust has helped protect Plateau water resources through numerous projects, dating back to 1988 when we filed a lawsuit against WAPA, the federal agency that markets electricity generated at Glen Canyon Dam. Our lawsuit was successful; the court required WAPA to evaluate the environmental impacts of the agency's marketing criteria for hydroelectric power generated at Glen Canyon Dam. This legal victory led to Congress passing the landmark Grand Canyon Protection Act.

In 1990, Ed Norton, President of the Grand Canyon Trust, testified before the Water and Power Senate Subcommittee on the needfulness of the Grand Canyon Protection Act:

For 15 years, the policy that power generation [at Glen Canyon Dam] has complete and total primacy over all other values and uses of the Colorado River has haunted this controversy like a ghoulish omnipresence, wreaking havoc on the downstream environment. The Grand Canyon Protection Act of 1990 drives a stake through the heart of that policy.

With Trust support, the Grand Canyon Protection Act passed in 1992. It requires the Secretary of the Interior to operate Glen Canyon Dam and use other authorities to restore and protect Grand Canyon resources. The Act also required that an Environmental Impact Statement (EIS) be done on Glen Canyon Dam operations. That EIS was completed in 1995 and required, as one of its consequences, the creation of the Glen Canyon Dam Adaptive Management Program.

The Trust has participated in the Glen Canyon Dam Adaptive Management Program (AMP) since its inception continued on next page



Colorado River in western Grand Canyon.

First Colorado Plateau Town Hall held in Moab, co-hosted by the Trust and other Colorado Plateau Forum members Trust hosts a series of cultural resource management training sessions across the Colorado Plateau

Beyond the Rangeland Conflict published

in 1996. One of our early successes was the flood release experiment done in Spring 1996, called a Beach Habitat Building Flow (BHBF), designed to build beaches and improve habitat for native fish.

Important conservation work has been done in the AMP. The Trust was instrumental in developing the AMP Strategic Plan, which describes 12 goals for the program. These goals include attaining viable populations of native fish and improving sediment conditions in the river system. The Trust also led the effort to develop the Humpback Chub Comprehensive Plan, a plan of 21 projects designed to improve conditions for the endangered humpback chub and other Colorado River native fish.

The Trust helped develop an experimental flows program that included the 2000 low summer steady flow, a low flow regime designed to improve habitat for native fish; high fluctuating flows in 2003 and 2004, designed to disrupt non-native fish spawning; and, most recently, the November BHBF, a flood release similar to the one done in 1996. To help pay for some of these experiments, the Trust successfully lobbied Congress for additional AMP funding.

To stimulate change needed to save the humpback chub, the Grand Canyon Trust filed an ESA Section 4 lawsuit on March 31, 2004, challenging the adequacy of the Recovery Goals for the humpback chub. On August 1, 2002, the U.S. Fish and Wildlife Service issued Recovery Goals for four endangered Colorado River fish—the humpback chub, bonytail, Colorado pikeminnow and razorback sucker. These new Recovery Goals are inadequate in many ways, most detrimentally with their inclusion of extremely low minimum viable population numbers, the number of fish needed for recovery. The goals state that humpback chub are recovered at 2,100 fish even though the Grand Canyon population has declined while endangered to the present level of over 3,500. Earthjustice is our legal partner.

In 1997, the Trust began driving the debate to remove the Atlas uranium tailings pile from its close proximity to the Colorado River near Moab, Utah. The toxic site contains 12 million tons of uranium mill wastes which each day leak 12,000-15,000 gallons of highly toxic contaminants into the groundwater. We are advocating to have the site moved to a more suitable location.

The Trust mobilized conservation efforts that resulted in the withdrawal of nearly 200 miles of scenic riverways along the Green, Colorado, and Dolores Rivers in southeastern Utah from the exploration of new hardrock mining claims. Resource protections resulting from the withdrawal include 161 prehistoric sites, endangered species habitat, and 32 BLM recreation sites along the Colorado River.

A proposal was made by Interior in 2002 to construct a pump and pipeline at Jackass Canyon within Grand Canyon National Park to bring water to coal mines on the Hopi Indian reservation. According to a Bureau of Reclamation report, the project would involve drilling 1,200-foot shafts in the canyon rim at Jackass Canyon, a popular hiking spot within Grand Canyon. It would also entail constructing storage tanks and pumping stations in the Canyon. The Grand Canyon Trust successfully lobbied against the \$125 million Grand Canyon water project and the Canyon pipeline idea has been dropped.

The Grand Canyon's south rim springs are fed by the same aquifer projected to decline from groundwater pumping south of Grand Canyon. The Trust is helping to protect these fragile seeps and springs through many efforts. In 1999, we helped secure \$300,000 in funding for the park to conduct monitoring of key spring sites. In 2000, we sponsored a Hydrology Symposium aimed at improving knowledge of aquifers and springs in the region. The Trust helped form various regional water efforts aimed in part at protecting Grand Canyon seeps and springs and other natural resources.

The Trust has led the charge to develop and implement water conservation alternatives in the Greater Grand Canyon region. In 2002, we commissioned Rocky Mountain Institute to analyze the region's water demand and continued on page 29

Charting the Colorado Plateau: An Economic and Demographic Exploration released Trust awarded the Society for American Archaeology's Public Service Award

First Colorado River dam release to create a flood and restore habitat

Coming of Age

by Geoff Barnard, President (1995 - 2003)

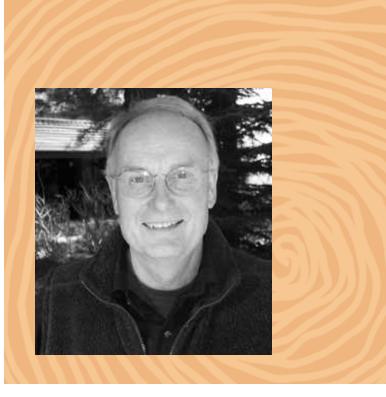
n any organization's history, there is that awkward time between being a heady start-up and arriving at staid maturity. I took over as President of the Trust in July 1995 at just that in-between time. Some people would call this time "organizational adolescence" and, as with teenagers, it comes with a quest for the organization's true identify.

The Trust has always had two conflicting views of itself. One is a no-holds-barred advocacy organization, a la the Sierra Club, SUWA, or the Center for Biological Diversity. The other is the moderate, community-based organization, able to work with local people to solve problems in a mutually acceptable way.

During my time as President, the divergence of these two views of Grand Canyon Trust was played out at every level in the organization—board, staff, and donors. Some board meetings erupted into bitter debates over whether the Trust should be a harder advocate or be more collaborative. Staff, too, divided between those working for change at a community-level, and those filing lawsuits or appealing federal agency decisions. Some donors found the Trust too hard-edged and some found it too nonconfrontational.

It was hard to be both, but that is exactly what we frequently succeeded at doing. We worked with local officials to save land near Flagstaff, Moab, and St. George, while fighting them on development. We cooperated with federal agencies on the flood-flow experiments below Glen Canyon Dam, while filing appeals on their agency's actions. We worked with ranchers for friendly acquisitions of their grazing permits, while being allied with environmental groups who vilify ranchers and cattle.

Over time, however, one organization playing both the "good cop-bad cop" role became extraordinarily difficult. At one point, a federal official told me that working with the Grand Canyon Trust was like "handling a viper." He never knew when the Trust might turn around and strike. Larger forces came into play that made the conservation broker role harder and harder to play. The *coupe de grace* was delivered by the Bush Administration when it



launched such a sustained attack on western lands that moderation proved almost impossible.

As difficult as this dual role is, I think it is exactly the right one. The tragedy of the environmental movement in the western United States lies in polarization. Environmentalists and ranchers/loggers/developers are like prize-fighters in the ring, each trying to deliver a knock-out punch to the other. This scenario is repeated over and over again in the West—ranchers protest that grazing hasn't harmed the land, environmentalists argue that all grazing is wrong, when the truth—and the practical solution—lies in some middle ground. Science and reasonableness often get lost in the scuffle.

The Trust has carved out a very difficult, but vital niche in the environmental movement. The challenge will be whether or not, with the most intensely anti-environmental administration ever, the Trust can resist the powerful pull to abandon collaboration and resort only to opposition advocacy. My hope is that the Trust in its maturity will keep the best qualities of its adolescence. By being tough when toughness is needed, by being collaborative when collaboration is needed, the Trust is playing a role that few dare to even try.

Grand Canyon Visibility Transport Commission report and recommendations released

Grand Staircase-Escalante NM designated by President Clinton

Trust and Conservation Fund retire grazing from the Low Spur allotment along the Green River

Minor Voices Deliver Major Message

by Tom Robinson



Slickrock in Escalante River region.

ccording to Barry Lopez, "the geographies of North America, the myriad small landscapes that make up the national fabric, are threatened by ignorance of what makes them unique." He assures us, however, that "a testament of minor voices can clear away an ignorance of any place, can inform us of its special qualities."

Since 1985, the Grand Canyon Trust has marshaled a growing legion of minor voices into one major voice for the Colorado Plateau's canyons, rivers, and forests. In doing so, we have successfully imparted knowledge of our landscape, one place at a time, enabling us to compile an astonishing list of landscape protection accomplishments.

Some of our most notable accomplishments include the following:

 In Utah, creation of The Grand Staircase-Escalante National Monument, the first monument established under the Bureau of Land Management's (BLM) new National Landscape Conservation System, triggered several projects for the Trust. We worked with individual ranchers and the BLM to retire close to a half million acres of cattle grazing along sensitive riparian areas, thus accomplishing the first actual, on-the-ground conservation within the BLM's flagship national monument. Using market incentives, we later eliminated 50,000 acres of oil and gas leases within the monument. Finally, we purchased a 34-acre private inholding at the Calf Creek and Escalante River confluence that was slated for commercial development. We remain active in the ongoing planning process and management of the monument.

 The recent signing of the long awaited Three Rivers Withdrawal caps an extended effort to protect 200 miles of the Green, Colorado and Dolores river corridors and an additional 50 miles of side canyons from nuisance hard rock mining claims for 20 years.

Grand Canyon Region Archaeology Conference hosted by Trust

Arches NP expansion proposed by Trust

Headquarters office moves to the Lockett Homestead

Grand Canyon Forests Partnership created Beyond the Boundaries—The Human and Natural Communities of the Greater Grand Canyon released

- In Arizona, the Trust played a significant role in the creation of Grand Canyon-Parashant and Vermilion Cliffs
 National Monuments. As in Utah, we made the first
 on-the-ground conservation move by working with
 the Conservation Fund to retire grazing on 50,000
 acres flanking Mt. Trumbull. We continue to play a
 major role in developing Resource Management Plans
 for these monuments.
- In Arches National Park, the Trust worked with Congressman Chris Cannon (R-Utah) to add a complex of stream-filled canyons, known collectively as Lost Spring Canyon, to the park. The legislation allowed for the elimination of cattle grazing within the new addition, which the Trust also accomplished with the help of the rancher.
- In the West, no other land system is quite as anonymous as those lands gifted to the states by the federal government at statehood. The Trust has been very active in protection efforts for these lands both systemically and parcel by parcel. In Arizona, GCT is engaged in a collaborative effort to reform the management and disposition of the state's nine million acres. We hope that a future ballot initiative will lead to the outright preservation of many lands identified by the Trust and others as ecologically and recreationally significant.
- Similarly, the Trust was a leader in efforts to protect Utah State Trust Lands in Castle Valley and along the Colorado River near Moab. We are also working to secure passage of a 35,000-acre land exchange between the BLM and Utah State Lands.

Although most Trust land protection efforts focus on protecting large landscapes, the following are some of our notable smaller-scale accomplishments.

- Working closely with Senator Jon Kyl (R-AZ), we secured funds to purchase the ecologically significant Dry Lake Caldera near Flagstaff, AZ. It is now Forest Service land and is accessible to the public.
- The Trust helped secure money for purchasing the historic Grafton town site and its adjacent riparian land

along the Virgin River near St. George, UT. It is now managed by The Grafton Heritage Partnership.

Finally, the Trust influenced the development of several land protection bond initiatives. In Flagstaff, our role in the Coconino Open Space Alliance, combined with our significant role in helping Coconino County craft a conservation-minded Comprehensive Management Plan, led to passage of a county bond initiative that will lead to the protection of important private and state land. In Utah, we backed a state bond initiative that was defeated. We will revisit this issue, hoping to build on the existing base of support for open space protection.

One of the first issues addressed in the Trust's founding year was visual and noise pollution caused by scenic air tours over the Grand Canyon. This led to the passage (but not yet successful implementation) of legislation designed to restore the Grand Canyon's "natural quiet." We were also instrumental in the passage (but not yet successful implementation) of legislation addressing noise pollution threats in other national parks including Zion, Bryce Canyon, Arches and Canyonlands.

Visual and noise pollution also threatens our new national monuments and other scenic wild lands. According to Barry Lopez, "it is through the power of observation, the gifts of eye and ear, that a place first rises up in our mind; afterwards it is memory that carries the place, that allows it to grow in depth and complexity. For as long as our records go back, we have held these two things dear, land-scape and memory."

For twenty years the Grand Canyon Trust has told the stories of the special places mentioned above. Barry Lopez says that a story is the voice of memory over the land. Together, our collective memory and the testament of our minor voices have led to the protection of so much that we love. Thanks to your support through the years, the Grand Canyon Trust has become a major voice defending these beautiful places so often seen in ads, movies, and magazines. Thanks to you, they are no longer so deeply threatened by ignorance of what makes them unique.

Mohave Generating Station lawsuit filed Trust, Sierra Club and Earthjustice file suit challenging USF&WS and NRC Atlas plan to protect Colorado pikeminnow

Arches National Park expanded by Congress

Lawsuit filed to protect natural quiet in GCNP

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Second Community Conservation Summit held in Cortez, CO Trust retires grazing in Lost Spring Canyon

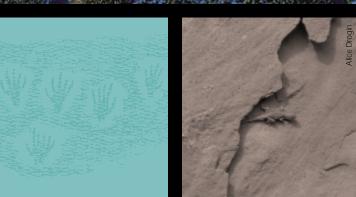
Since 1985 the Grand Canyon Trust has worked hard to protect the Colorado Plateau's spectacular and vulnerable places like those depicted here, from exploitation.

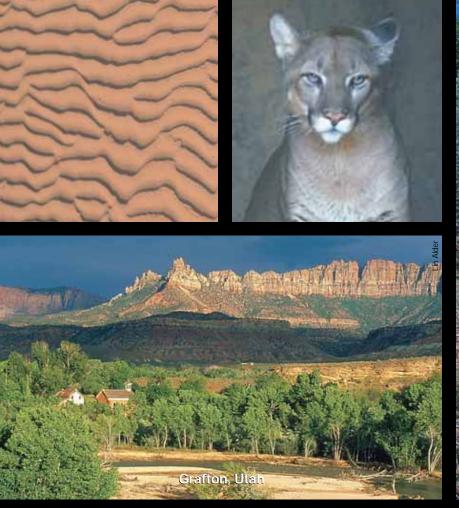






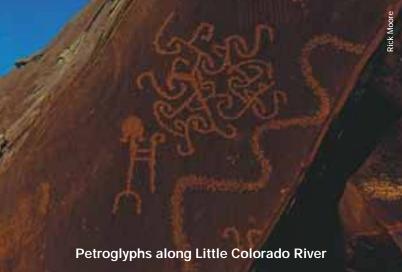












However, none of our work would have been possible without the support of our 5000 + members, the dedication and commitment of our board members, other conservation groups, and the philanthropy of hundreds of individuals and dozens of foundations across the country.

Leading the Way on Forest Issues

by Taylor McKinnon & Ethan Aumack

orests flanking the Colorado Plateau's high mountains and plateaus form a diverse and lesser-known backdrop to the region's world famous canyon country. Not only are they places of rare beauty, they are the source of our clean air and drinking water, and home to a vast array of valuable and increasingly imperiled plants and animals. However, these forests now reflect a century of forest management that placed resource production above other values. Nowhere are the legacies of timbering, livestock grazing, road building, and fire suppression more pronounced than in southern Colorado Plateau ponderosa forests. It's here that Grand Canyon Trust began its forest conservation work.



Kaibab Forest, North Rim.

The autumn 1997 issue of the Colorado Plateau Advocate announced the Trust's founding of the Grand Canyon Forests Partnership; its purpose to restore degraded and fire prone forests surrounding the city, reduce the fire threat to the community, and balance ecology and economy by developing viable uses for small diameter trees. Today, the Greater Flagstaff Forests Partnership (GFFP) is an independent non-profit directed by a diverse coalition of academic, agency, industry, and conservation interests, and is often touted as a national model in collaborative forest restoration.

With the Trust's help, GFFP has designed and advanced four restoration projects spanning tens of thousands of acres. Resulting forests are resilient to surface fire, have reduced road densities, and are growing into what in a century will be magnificent old growth forests providing an abundance of wildlife habitat, clean air and water. Associated research has advanced the state of restoration knowledge, and public and scientific debates surrounding the Partnership's efforts have supported the national dialogue on forest and fire restoration issues.

Grand Canyon Trust's leadership on forest and fire issues has afforded us a strong voice in the broader policy arena. The Trust was the only conservation group invited to testify before both the House and Senate during the legislative battle that, despite our vigorous dissuasions, resulted in the Healthy Forests Restoration Act. Today, Trust staff plays key leadership roles in the conservation community, and in policymaking bodies at the state and regional levels.

In 1999, to address issues related to forest habitat fragmentation, Grand Canyon Trust produced a comprehensive and precise inventory of every road in the 270 square mile area surrounding the San Francisco Peaks. Volunteers documented significant resource damage associated with roads, and road densities far exceeding National Forest standards and wildlife tolerances. Additionally, the Trust produced an annotated bibliography containing over 200 scientific articles describing the ecological impacts of roads. These efforts are playing an important role in an ongoing USFS planning process to reduce the destructive effects of off-road vehicles in five of Arizona's National Forests.

Most recently, Grand Canyon Trust, in cooperation with other conservation partners, embarked on development of comprehensive conservation alternatives for managing three southern Utah National Forests. These alternatives address all facets of National Forest management and are designed to balance extractive land uses with the needs of plants and wildlife. They will be

continued on page 29

2000 Citizens Growth Management Initiative filed Retired livestock grazing in 132 miles of Grand Staircase-Escalante National Monument canyons

Grazing Retirement in Capitol Reef National Park

Consent decree with Mohave signed, requiring the installation of up-to-date pollution control equipment

Volunteers Promote Conservation

by Karen Murray and Richard Mayol

he Grand Canyon Trust volunteer venture sprouted informally in 1999 when Mark Brandt convinced a small army of people to log thousands of miles on their personal vehicles while mapping remote roads created by logging operations and off-road vehicle use in the area surrounding the San Francisco Peaks. It has since blossomed into a formal, hands-on program where retirees, students, stay-at-homemoms, youth groups, service clubs and others contribute their time, sweat and unwavering energy to meaningful Colorado Plateau conservation projects.

During summer and fall of 2000, more than 130 GCT volunteers traveled the tracks and trails in the region's roadless areas gathering information on ecologically invaluable "core" areas and the corridors that connect them. Guided by Ethan Aumack, the data, photographs, and annotated maps they assembled provided one of the most significant conservation field inventories ever done for the region and generated important information for the scoping phase of the proposed Roadless Rule legislation.

Bob Hoffa took the reins of the volunteer program in 2001 and led 80 volunteer conservationists on missions to protect prairie dog habitat, close and rehabilitate unauthorized campsites, and protect Mexican spotted owl habitat. In addition, the volunteers constructed 1000 feet of fence to protect a natural spring from elk browsing and surveyed nearly 100 parcels of state trust lands identifying their biological and scenic qualities for potential future conservation.

In 2002, volunteers completed several projects including ongoing surveys of state lands, continued restoration activities at Chimney Springs, and completion of fish surveys and crawfish trapping projects at Fossil Creek. Working with the Arizona Game and Fish Department, Trust volunteers assisted antelope movement by removing and reconfiguring rangeland fences and mapped prairie dog colonies while gathering information to determine colony size and changes over time.

The Volunteer Conservationist Program continued grasslands restoration on Anderson Mesa in 2003 and assisted Grand Canyon National Park wildlife biologists by monitoring California condor activities at two nest sites. In cooperation continued on page 30



Grand Canyon-Parashant National Monument established

Standard

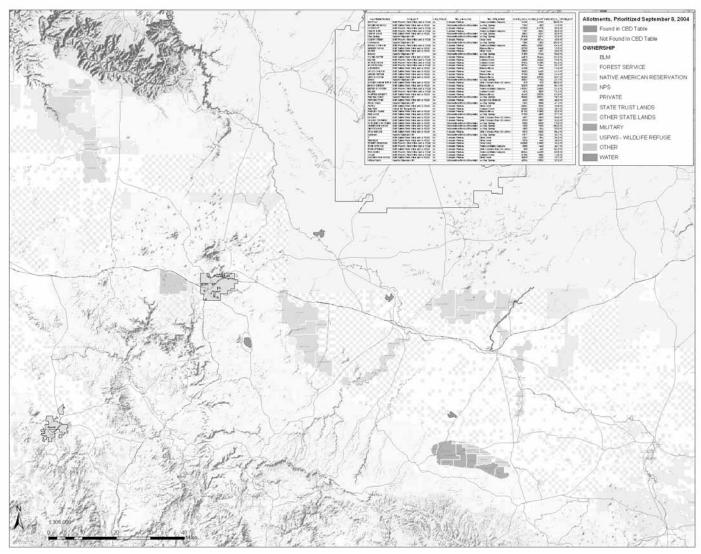
Trust files second natural quiet lawsuit

Vermilion Cliffs National Monument established

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GIS Technology Critical in Land Use Planning

by Steve Fluck



and use decisions impacting the long term occur in the thousands every day, usually without the input of current science. A Geographic Information System (GIS) is a relatively new and important tool commonly used in conservation planning and natural resource management. Any problem or question involving "map-able" (spatial) information can be addressed with a GIS. Conservation Spatial Analysis for Grazing.

Essentially, a GIS consists of three components: software, a computer, and spatial data files. The spatial features displayed on a monitor usually take the form of points, lines and polygons. A polygon usually has many sides and a random shape; triangles and squares are examples of simple polygons. The software is designed to make it easy to understand and analyze the relationships between the spatial features.

continued on page 30

Citizen's Growth Management Initiative defeated

GIS Program established

Trust completes fundraising to purchase Grafton on the Virgin River

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White Vulcan mine agreement signed

Trust helps purchase open space in Castle Valley

50,000 acres of oil and gas leases in Grand Staircase-Escalante National Monument purchased and retired by Trust

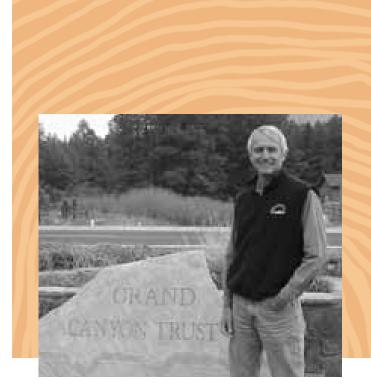
Getting to Scale

by Bill Hedden, Executive Director

e live in a time when the chickens are coming home to roost from a century and a quarter of gobbling up the bounty of an arid, frugal land. Until we learn to live more wisely within the constraints of this place, the job of conservationists will remain that of gathering the moral, legal and scientific persuasions that will stay our hand and make us find a better path before we kill off the wild earth and our future, too, without intending it or even realizing what we are doing. The Grand Canyon Trust has been blessed with many significant achievements in protecting and restoring the Colorado Plateau during its first twenty years. Today, it seems to me that our great challenge is to expand these works to the land-scape scale in order to match the scale of the problems.

For example, pioneer ranchers described lands on the Colorado Plateau as "rich as a grainfield," with "grass up to the belly of a horse." An initial onslaught of hundreds of thousands of cattle and sheep quickly cropped that natural inheritance to nothing, and a century of continuous follow-up grazing reduced streams to muddy trickles and pushed out the native species. Among the casualties were the ranching communities themselves, no longer able to wrest a living from the depleted land. The Trust has long been partnering with willing ranchers to buy out ecologically critical lands and remove the livestock. We are now taking that program to a new level with the impending purchase of the 860,000-acre Kane and Two Mile ranches on the Grand Canyon's north rim.

Scientists now understand that our history of suppressing fires while overgrazing and overcutting the forests has produced a crowded, spindly tinderbox ripe for ecological and social disaster. The Trust pioneered collaborative experiments in restoration, with in-the-woods treatments of thousands of acres around Flagstaff. This is great work, continuing today, but it must be expanded to millions of acres of fire-adapted forests. So, we are creating a vision of how to restore healthy forests and working to achieve it through policy changes at the state and regional level. Large scale stewardship contracts are being let and markets



are being created for small diameter timber products and biomass fuel. Restorative fire is beginning to burn in the woods again. In southern Utah, we are working with other groups to write sustainable use management plans for five million acres of national forests that comprise the watersheds of the redrock canyon country.

The quality of the air over the Colorado Plateau has occupied the Trust since its inception. Eighteen coal-fired power plants surround the region, blurring the air, tainting the scarce water with mercury, filling lungs with pollutants. On these issues, as nowhere else, we have resorted to the courts to enforce the Clean Air Act, continuing tough litigation and negotiation to this day at the Springerville and San Juan powerplants. New awareness that the big brother of local air pollution, what Amory Lovins calls "global weirding," threatens to parch the Plateau like an ancient corncob, has led the Trust to work together with the Hopi toward what might become the largest wind energy installation on any tribal lands in the U.S. Our expanded collaboration with the tribes is something new that we are excited about. We are also working to craft a regional water supply plan for northern Arizona that will give us hope of inhabiting this arid place sustainably, which is what the Trust is all about.

Grand Canyon Forest Partnership starts work on first phase of the 9,100-acre Fort Valley Ecosystem Restoration Project 56,000 acre Clark Bench allotment in Grand Staircase-Escalante NM purchased and cattle removed Option to purchase land at Calf Creek in Grand Staircase-Escalante NM purchased

Springerville power plant lawsuit filed

Trust files lawsuit on St. George airport expansion

2 0 0 1

Grazing Reductions Protect Plateau Treasures

by Lisa Force

he Grand Canyon Trust has long been concerned with the impacts of cattle grazing on the fragile desert, forest and riverine ecosystems of the Colorado Plateau. Partly due to its pervasiveness, some scientists consider overgrazing to be more harmful to native southwestern habitats than any other single factor. According to Philip Fradkin, in *Eating of the West*, "The impact of countless hooves and mouths over the years has done more to alter the type of vegetation and landforms of the West than all the water projects, strip mines, power plants, freeways and subdivision developments combined." Cattle pollute scarce desert springs and streams, trample vegetation, spread exotic plant species and disease organisms, cause soil erosion, and compete with wildlife for food.

Ranching, though, is an important part of the culture on the Plateau and some progressive ranchers and land managers have shown that parts of the landscape can sustain careful grazing use without further degradation. So, the problem really is not grazing everywhere, but grazing in the critical places that knit the ecosystem together. Land managers generally understand these impacts, but are unwilling to impose grazing closures on ranching families already hard hit by drought, low beef prices and decimated grasslands. Here the Trust saw an opportunity to buy out willing-seller ranchers whose cattle were in the streams and other areas of highest biodiversity, thus clearing the way for land managers to close these places to livestock.

The Grand Canyon Trust began pursuing grazing reductions in 1996. Since then, we have successfully removed cattle from hundreds of thousands of acres and hundreds of stream miles across the Colorado Plateau. In areas where the Trust succeeded in removing cattle, amazing transformations have already begun, such as in Lost Spring Canyon in Arches, where the Park Service documented a 30% increase in native species diversity within a year. The Trust's major successes in reducing grazing and restoring rivers include:

- In 1996 the Trust, in cooperation with the Conservation Fund, bought out grazing permits on 55,000 acres surrounding Horseshoe Canyon in Canyonlands National Park, protecting the canyon's abundant springs and archaeological treasures.
- In 1997 the Trust began work on a deal to retire grazing from the Lost Spring Canyon area by crafting and promoting the Arches National Park Expansion Act. The legislation, which added the Lost Spring Canyon area to Arches National Park, passed in November 1998. Shortly afterwards, the Trust bought out the grazing permits in Lost Spring Canyon, permanently removing cattle from the entire system of five canyons.
- During the summer of 1999 the Trust helped retire the last grazing in the northern range of Capitol Reef National Park. When the 11,688 acre Cathedral Allotment came on the market, the Trust was able to partner with the Park Service to permanently retire grazing from this beautiful valley.
- In early 2000 the Trust retired grazing in the 63,000 acre Robbers' Roost allotment on the west side of the Canyonlands Basin. The allotment lies at the headwaters of several major canyon systems and includes some of the wildest country in all of southern Utah.
- Establishment of the new Grand Staircase-Escalante National Monument in 1996 set the stage for some of the Trust's most significant grazing retirement projects. In 1998-99 the Trust crafted agreements that completely removed grazing from the entire main canyon of the Escalante River and from more than a dozen of the most important side-canyons. The forage was reallocated to "wildlife, watershed conservation, riparian, and fisheries." Altogether, 3,853 Animal Unit Months (AUM) of grazing were removed from 132 miles of spectacular canyon streams.
- In 2001 the Trust established its non-profit public lands ranching company, the Canyonlands Grazing Corporation, for the purpose of holding base ranch properties.

12,000 acre Willow Gulch grazing allotment in Grand Staircase-Escalante NM purchased and cattle removed

Court issues favorable ruling on St. George airport lawsuit

Court rules for Trust on natural quiet in Grand Canyon

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Grazing cattle, Grand Staircase-Escalante National Monument.

This allows the Trust to buy federal grazing permits and negotiate their retirement as full permittees.

 Canyonlands Grazing Corporation has bought out the 56,000 acre Clark Bench allotment along the Paria River, the 12,000 acre Willow Gulch allotment encompassing the headwaters of Calf Creek, the 18,000 acre Big Bowns Bench allotment east of the Escalante River, and the 256,000 acre Last Chance allotment on the Kaiparowits Plateau.

The latest transaction undertaken by the Trust is the largest by far. On July 14, the Grand Canyon Trust announced that, in cooperation with the Conservation Fund, it had purchased an exclusive option to buy the Kane and Two-Mile ranches on the north rim of the Grand Canyon. The ranches include 1,000 acres of private lands,

plus federal and state grazing permits covering nearly 800,000 acres, including some of the most varied habitat in the West. Much of the Kane Ranch is made up of the sky island of the Kaibab Plateau, which is home to the highest density of remaining old-growth ponderosa pines in the Southwest and which harbors imperiled species such as the northern goshawk, the Mexican spotted owl, a pure population of Apache trout, and the endemic Kaibab squirrel. The Two-Mile Ranch encompasses the Vermilion Cliffs National Monument, the center of reintroduction efforts for the endangered California condor in Arizona. Taken together, the two ranches are considered the best possible habitat remaining in the Southwest for the reintroduction of Mexican wolves. The Grand Canyon Trust's primary management goal will be ecological protection and restoration.

Trust acquires 38,350-acre Tuweep allotment and removes livestock

Trust releases North Central Arizona Water Demand Study Bill Hedden becomes Executive Director

process complete

Headquarters' photovoltaic system comes on line

2 0 0 2

Coconino County
Comprehensive planning

Trust and Utah Open Lands purchase 560 acres of critical deer habitat in Castle Valley

Partnering with Native America

by Tony Skrelunas

"Navajos have always been very adaptive. They have been very skillful at surviving. I think that is a good thing, too, about small communities. I think that we know how to survive. What ever the federal government does, whatever outside forces do, we do know how to survive. We do know how to adapt. We can, if we talk about it, accept and find, and live with, creative ways of dealing with our problems."

Claudine Bates-Arthur, Chief Legislative Council, Navajo Nation at the 1991 Colorado Plateau Community Initiatives Symposium.



Havasupai girl coating a basket.

he Trust's Native America Program has a successful history working with Native American governments and communities that began in 1991 when the Trust and other conservation organizations encouraged the Kaibab-Paiute Tribe of Eastern Utah to consider options to a proposed waste incinerator. The tribe rejected the incinerator and engaged the Trust to assist with local economic development efforts. The work products resulting from this relationship include a comprehensive economic development plan, and a Tribal Farm improvement plan, both focused on creating sustainable alternatives.

At the same time, the Trust lead an outreach effort entitled "Colorado Plateau Community Initiatives." By providing a platform to discuss issues and strategies for a sustainable future from several points of view, it was instrumental in creating a dialogue between Colorado Plateau decision makers. This work required a Native American Leaders symposium to define how the tribes and GCT could work together. The tribes were also major participants in the subsequent symposium held in Cedar City, Utah, in which ranchers, farmers, community leaders, tribal officials and Chairs, attorneys, and other concerned citizens openly discussed the issues.

Building on the symposia energy, the Trust worked with the Navajo Nation to create a tourism planning process based in community involvement. The project's intent was to identify ways to manage the impact of visitors on the environment, and tribal culture and traditions. It resulted in creation of a community plan and tourism association for Cameron.

During this time the Trust worked with tribes throughout Arizona and the Four Corners region to organize the first Southwest American Indian Tourism Conference, where approximately 140 tribal participants from all walks of life and professions created strategies for sustainable tourism development. This meeting established the foundation for the Arizona American Indian Tourism Association (AAITA), another effective organization the Trust helped incubate. Many successful projects have been implemented because of AITA, which still exists today. The Navajo Nation Tourism Department continues to use a community-based planning approach and southwest Tribes continue to effectively manage tourism through annual meetings at the state, regional and national level that support and allow collaboration on projects.

District Court rules in favor of Trust on San Juan case Flagstaff residents approve funding to purchase open space lands on Observatory Mesa Trust provides GIS component of Utah Wilderness Coalition comments on BLM Resource Management Plans

Trust assists with the Hopi-Navajo Entrepreneurial Collaborative

2 0 0 4

The Trust also provided advisement on the "Navajo" or "N" aquifer issue—encouraging a regional solution. The Trust Director at the time was Navajo Tribe member Tony Skrelunas, an MBA candidate from NAU. Other team members included Susan Secakuku, a Hopi Graduate student who served as coordinator for the first Southwest Tourism Conference. Consultants included Tom Parker, Blair Leist, Pam Hait and Martha Hunter.

Earning his MBA, Tony left the Trust to run Bright Edge Associates, an economic consulting business. He was later recruited to serve as the Executive Director of Government and Economic Development for his Tribe.

After Tony's departure, the Trust worked with tribes through its regular program structure on issues such as Colorado River management, protection of Grand Canyon seeps and springs, San Francisco Peaks protection, archeological resources protection, and air quality improvement.

In early 2000, GCT founded the Greater Flagstaff Forest Partnership, which led to the creation of the "Hogan Project," a plan to build a sustainable business utilizing the by-products of forest restoration projects. From this plan the Southwest Tradition Log Homes Corporation was born in Cameron, where it uses small diameter pine logs to build quality, affordable housing.

The Trust also worked with the Navajo Parks and Recreation Department on a training session with Grand Canyon National Park staff. This session helped advance subsequent efforts by Coconino County to ensure funding for an open space tax to include funds for parks improvements in Western Navajo—including Antelope Canyon, Little Colorado River Overlook, Grand Falls, and Tuba City Community Parks.

Another vital effort was our support for the Black Mesa Trust, which was created by GCT Board member Vernon Masayesva. The Black Mesa Trust is a Hopi water conservation organization modeled after the Grand Canyon Trust. It has grown into an effective, self-sufficient non-profit and a successful model for Native American conservation organizations.



Paiute woman sitting by brush house.

In 2002, the Trust met with six tribes on the Colorado Plateau to re-establish our ties and explore opportunities to work together. The outcome was that the Tribes indicated they desired to work with the Trust on the following issues: sustainable economic planning, growth management, watershed restoration, forest management, and renewable energy development.

Upon learning about these opportunities the Trust recruited David Conrad, a member of the Osage tribe, to further relationship building as Director of Tribal Governmental Relations. In 2003, Mr. Conrad was recruited by the National Tribal Environmental Council to be their Director.

After meeting with Navajo Nation President Joe Shirley and Hopi Chairman Wayne Taylor, the Board and staff of the Trust very much wanted to assist the Hopi and Navajo Nations with sustainable development. In the fall of 2003, the Native America Program was reestablished with the hiring of Kelly Janacek as Program Manager, and Vanessa Vandever and Anna Masayesva as Program Interns. Subsequently, Tony Skrelunas rejoined the Trust to once again lead our efforts to help Native American communities achieve balance between traditional values and appropriate economic development. Vanessa

continued on page 30

Option to purchase Kane and Two Mile ranches by Trust and Conservation Fund signed

Utah Land Exchange Legislation introduced

Trust assists with the development of the Foresight Wind Park on Hopi Lands

US Court of Appeals overturns unfavorable laches ruling on Springerville case

2 0 0 4



Ethan Aumack, former manager of several Trust programs from 1997-2001, returned in November 2004 as Director of Restoration Programs. He will be co-manager of the Trust's fire and forest restoration work on the southern Plateau and provide oversight for restoration activities planned for Kane Ranch.

Ethan's work will focus primarily on efforts to initiate or accelerate the recovery of natural landscapes and processes, and native plant and animal species in the region.

Previously, Ethan worked with The Nature Conservancy as a restoration ecologist. He recently completed a 42 month stint with the Sisk Lab for Conservation and Landscape Ecology at Northern Arizona University where he worked on the Forest System Restoration Analysis (ForestERA) project.

Ethan earned a BA degree from Swarthmore College and an MS in Environmental Science and Policy from NAU. His professional interests center on conservation and restoration planning and the connection between environmental science and public policymaking. Ethan finds personal enjoyment in seeking out, exploring and appreciating the remaining wild places.



Vanessa Vandever, formerly a Program Associate with the Trust's Native America Program, has been promoted to Program Manager. Fresh off her summer stint at Senator McCain's office as part of the Morris K. Udall Foundation's Congressional Summer Internship Program, Vanessa is ready for new challenges.

As Program Manager she will focus her attention on the Hopi and Navajo Tribal Sustainable Development Education Project, which seeks to create more diversified tribal economies less dependent on natural resource extraction. Vanessa will lead outreach and research efforts to determine the needs and economic development tools that best fit the cultural, environmental, and social dynamics of the Hopi and western Navajo communities.

In addition, Vanessa will be assisting Navajo Nation Parks and Recreation with sustainability planning for the proposed Monument Valley Resort project. She will also work with Greg Ireland to research and write grants to fund the Native America Program.

Ms. Vandever earned a B.A. in Political Science from Stanford and is working towards an M.S. in Resource Management from Central Washington University.

The Grand Canyon Trust said good-bye to two employees this fall and wishes them all the best in their future adventures.

Kelly Janecek, a valued Trust team member since 1998, left in October to have a baby. Kelly was a key player in the establishment of the Native America Program. As administrator for the program she produced critical research for one of its first projects; the feasibility of a bottled water business. She was also instrumental in establishing our ongoing working relationship with Black Mesa Trust, a collaborative partnership that will produce positive results into the future.

Karen Murray, resident wolf re-introduction advocate and Volunteer Conservationist Program manager, exited in November to move to Portland. Karen joined the Trust in May 2003 and became Program Manager in May 2004. This year she led a force of 85 volunteers in efforts to improve pronghorn habitat, monitor California condors and prairie dogs, renovate downstream sections of the Verde River and Granite Creek, and provide restoration activities at Stillman and Long Lakes. Her unbridled enthusiasm will be missed.

Trust Welcomes Senior Fellows

Dr. John Carter recently joined the Trust as a Senior Fellow where he will focus his considerable experience on the analysis and determination of sustainable grazing practices for the Kane and Two-Mile Ranches. Dr. Carter is one of the West's foremost experts on public lands grazing issues. He has conducted extensive research into both terrestrial and aquatic ecosystems, the effects of pollutants on surface and ground water, and is an expert on the design and supervision of complex environmental reclamation and restoration projects.

In 1996, Dr. Carter founded Willow Creek Ecology Inc., a non-profit organization dedicated to addressing watershed and habitat deterioration caused by grazing on public lands. He joined Western Watersheds Project in 2001 as Staff Ecologist and Utah operations director. John has also served as an expert witness in litigation involving water and natural resource issues for several clients including the Colorado Attorney General's Office.

Dr. Carter has a PhD. in Ecology, and an M.B.A. and B.S. in Mechanical Engineering.

We welcome the addition of Arizona State University law professor Joe Feller to the Trust staff as a Senior Fellow. Acting as staff attorney, Mr. Feller will bring his deep knowledge to bear on natural resource and public lands issues in which GCT is engaged.

Feller built a national reputation as a leader on grazing issues beginning with his work in the Comb Wash area of Utah in 1988. There he won landmark rulings that said the BLM must analyze impacts and consider the appropriateness of grazing on public lands.

His writings on natural resource and environmental law have appeared in numerous legal and scientific journals and he has represented environmental interests before administrative boards, federal district courts and courts of appeal, and the U.S. Supreme Court.

Mr. Feller holds a B.A. from Harvard University, a PhD. in Physics from UC-Berkeley, and a J.D. from Harvard.

In Memorium

Grand Canyon Trust also lost a dear friend and supporter. Claudeen Bates-Arthur passed away on November 27 in Fort Defiance after a lengthy illness. Ms. Bates-Arthur was a GCT Board Member from 1991 to 2003. She had a long and distinguished career serving the Navajo people who honored her as the first woman Chief Justice of the Supreme Court of the Navajo Nation. Bates-Arthur also served as the Nation's Chief Legislative Counsel and Attorney General. She was best known for her tireless efforts to enhance Navajo sovereignty through tribal courts.

Help Us Celebrate Our 20th Anniversary with a Charitable Gift

It was a sense of awe and reverence for the vast open spaces of the Colorado Plateau that birthed the Grand Canyon Trust twenty years ago. The clean air, big skies, roaring rivers, spectacular slickrock canyons and unique array of native plants and animals were under siege from an onslaught of people and industry. They cried out for protection and, with the help of generous souls like you, we answered.

Conservation Safeguards Threatened

While we've won many battles on behalf of Plateau resources since 1985, the fight to balance and align human and environmental needs continues. A new assault on the West's resources is now in high gear. The Roadless Area Conservaton Rule, Wilderness Act, Endangered Species Act, National Environmental Policy Act and other hard fought for safeguards gained over the last 35 years are threatened by an administration systematically working to undermine the protection of wild places, plants and animals.

Threats are on the rise. So if you share our passion for preservation of all that is wonderful and wild on the Colorado Plateau it's time to step up.

Whether in the form of a simple donation or one of the popular forms of planned giving such as a bequest, a charitable gift annuity or a charitable remainder trust, Grand Canyon Trust needs your help now.

Keep Grand Canyon Trust in the Fight

Will roads be built into remote wilderness areas? Will coal mining and gas drilling permeate our National Parks and Monuments? Will toxins be allowed to continue fouling our drinking water supply? These and other serious questions will be answered over the next few years and Grand Canyon Trust needs to be in the fight. Fighting on behalf of you and on behalf of the fragile places, plants and animals that have no voice without ours.

Twenty More Years of Protection

Your gift will help keep us working hard for the next twenty years on behalf of spectacular parks and monuments like Grand Canyon, Vermilion Cliffs, Grand Staircase-Escalante, Zion, Canyonlands, Arches and all the wild places in between.

Please send a tax-deductible donation today. For more information on planned giving and associated tax benefits please give Evelyn Sawyers a call at 928-774-7488 or email her at sawyers@grandcanyontrust.org.

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A Voice for the Plateau by Jim Trees

At that point, the future of the Trust was assured. To a large measure our success is a result of Ed's strong commitment, professional talent and focused energy.

Starting with our icon, The Grand Canyon, our dream was to preserve and protect the truly extraordinary canyons of the Plateau: Zion, Arches, Canyonlands, Paria, and of course, The Grand—places that forever resonate in one's soul. Our vision was not to stop economic growth. Rather, we sought to control and nudge it to areas where it would have little or no impact on our national treasures.

It's startling to look back 20 years and consider our significant accomplishments. Who would have thought that the first action of our tiny group, which was to restore natural quiet to the Grand Canyon, would result in legislation by the U.S. Congress? Our many accomplishments since are well known and a subject of shared satisfaction. Perhaps our greatest achievement, however, has been to raise irrevocably the level of awareness and quality of dialogue about important environmental issues across the Plateau. Today, the Trust speaks with a highly credible voice when environmental decisions are made on these precious lands.

Yet the challenges continue, even ones we once thought vanquished. Indeed, they just never seem to go away. As a result, the need for the Trust endures. Now more than ever, we need even greater efforts to galvanize informed support and encourage leading voices in the communities of the Plateau. As long as these natural treasures exist, so must we. Thomas Jefferson said, "The price of liberty is eternal vigilance." So too is the price of nature and beauty unspoiled.

continued from page 5 Leadership Builds Trust by Ed Norton

decisions. We can turn to the Congress, the courts, and the media. Most important, we also have organizations like the Grand Canyon Trust. We frequently bring our Chinese colleagues to the United States to visit places like Yellowstone, Yosemite, and Grand Canyon National Parks. Watching the reaction reaffirms that our National Parks are the "best idea we ever had."

We have our Chinese friends meet with representatives of TNC, the Greater Yellowstone Coalition, and the Grand Canyon Trust. The value of organizations that represent and advocate the love of land and natural heritage for millions of Americans is not lost on our Chinese friends. These organizations are undoubtedly the second "best idea we ever had." Here's to the next twenty years!

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Community-Based Conservation Brings Success by Brad Ack

have to listen carefully to the interests of others, and sometimes you have to compromise. But we stuck with it and while the name of the program changed a few times, the work grew and evolved over the years, through a variety of initiatives. Some that come to mind:

The *Colorado Plateau Forum*, which hosted regional "town halls" where residents of all walks, from across the Plateau, could meet and discuss the most challenging and controversial issues dogging the region, and do so in a neighborly and productive way.

Economic Renewal in Snowflake, Arizona, which introduced sustainable economic development ideas into the reality of a small community struggling through major economic shifts and trying to chart a good course for the future.

The *Sustainable Communities Guide*, a resource book for towns across the Plateau to help them access available resources for good planning, growth management, conflict resolution and sustainable economic development.

Flagstaff 2020, a broad-based visioning process in the Plateau's largest community, an effort that later led to a regional land use plan with the first-ever growth boundaries in Arizona. The vision further led to a new comprehensive plan for Coconino County, the largest on the Plateau, a plan that took the concepts of conservation biology and goal of preserving environmental health as its stated starting point.

The *Grand Canyon Forests Partnership*, an experiment in bringing sharply divergant interests into partnership around the common goal of healthy, productive forests, and designing forest restoration efforts that could satisfy all interests.

These are just some of the projects we tried in the bold and optimistic new field of community-based conservation. Some were successful, others less so. But all emanated from the same central proposition; that people's hearts and minds ultimately matter in conservation and you can't win without them.

This proposition about how to achieve lasting change has been at the core of Grand Canyon Trust since its inception, and it makes the Trust special in the ranks of environmental organizations. While there have been struggles to live up to this ideal of working with people—especially when it gets messy, tedious, slow, and you have to give some to get some—willingness to engage honestly in this struggle has set the Trust apart. And I hope it will continue to set the Trust apart.

From my vantage point today, in the policy halls of state government, I see ever more clearly that little happens politically without broad support from the community. And I am ever more convinced of the validity of the Community Initiatives ideal.

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Protecting Water by Nikolai Ramsey

water conservation possibilities. Their 160-page report highlights proven conservation alternatives, including wastewater reclamation, graywater reuse, and rainwater harvesting. Many of the report's suggestions are already being implemented in the region's communities and at Grand Canyon National Park.

Professional and personal history intertwine. On a cool spring morning, I stride down Grand Canyon walls looking for dimensions of refreshment and finding Page Spring, a natural alcove of quiet, fragile beauty. Amidst the dripping water, redbud trees, and azure damselflies I think of beauty's fragility and love's responsibility. Important places such as Page Spring are vulnerable to human carelessness and overreaching. Beauty and connectivity can be inspiring—successes in protection, too.

Footsteps from Canyon rim to Canyon spring, inspiration for fortunate work, remind us that the grand canyon protection act need not be capitalized, that we all have a part to play in this important work of care and preservation.



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Forest Issues by Taylor McKinnon and Ethan Aumack

compared in the NEPA process alongside Forest Service plan alternatives as those National Forests update their 10-year management plans.

Our future efforts to preserve and restore Plateau forests will include preventing misguided timber sales in ecologically important forests, increasing the rigor of science underpinning forest and fire restoration projects, and creating a more coherent context for those projects by advancing a comprehensive vision and strategy for landscape scale fire restoration.

Grand Canyon Trust takes very seriously our collective responsibility to preserve and protect for future generations these last great wild parts of America's heritage because we understand that once they are gone, they are gone forever.

continued from page 19 Volunteers by Karen Murray and Richard Mayol

with the USGS Colorado Plateau Field Station, Trust volunteers also helped monitor mountain lions to ascertain how roads, railways, and towns affect their movements. Working in concert with Coconino National Forest, Natural Resource Conservation Service, and Arizona Game and Fish Department, our volunteers helped restore Hay Lake by transplanting vegetation from surrounding wetlands, seeding with native grasses, and building protective fences. The volunteer year ended with a project assisting the Grand Canyon National Park with planting, seeding and weed control in the park.

Spring of 2004 brought more changes as Karen Murray took control of the volunteer program. It was a busy year with ongoing Condor and prairie dog monitoring, and pronghorn habitat improvement projects. In July, the US Fish and Wildlife Service enlisted our help to prepare for draining Stillman Lake, eradication of its non-native fish, and renovation of downstream sections of the Verde River and Granite Creek. Trust volunteers also assisted Grand Canyon National Park wildlife staff by documenting the non-native bison impact on the North Rim and working to remove tamarisk from the canyon's bottom. Long Lake also benefited from volunteer restoration activities.

In 2005, GCT volunteer attention will shift to projects on the Kane and Two Mile ranches as we begin science-based restoration activities for these newly acquired North Rim properties.

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Partnering with Native America by Tony Skrelunas

Vandever, a Navajo from Black Mesa and a Stanford University political science graduate, was recently named Program Manager after a successful internship and Kelly Janacek's departure.

The innovative direction embarked on by our Native America Program has been driven primarily by the first Native American Board members: Claudeen Bates-Arthur, Vernon Masayesva, and N. Scott Momaday. Through the years, Pam Hait, Jim Enote and Susan Williams joined to reinvigorate and strengthen the Native America Program. With the Program's focus on sustainable economic development, Ivan Makil has proven to be a valuable addition to the Board.

The Trust is very excited about the partnership opportunities created by the Native America Program and is encouraged by the possibilities of planting seeds for conservation through the people's own sovereign empowerment. The current priority of this program is to assist the Hopi and Western Navajo communities in creating a more diversified and sustainable economy that is less dependent on resource extractive and polluting industries.

continued from page 20 GIS Technology by Steve Fluck

Today, the Grand Canyon Trust uses a GIS to answer critical land-use questions posed by our staff, the staffs of our partners, agency planners, biologists, ecologists and others. Most important land use decisions, however, are ultimately decided in the political realm. As advocates, we are often faced with attempting to bridge the gap between science and politics described by Elizabeth J. Farnsworth as; "a gulf caused by differences in culture, timing and goals." GIS expert Charles Convis said, if used responsibly and appropriately, a GIS "may perhaps serve as a critical link in bringing academic theory to bear directly onto everyday land use decisions."

The Grand Canyon Trust GIS Program was instituted in 2000 with the support of grants from ESRI, a software company. As our analytical capacity has improved, we've attempted to answer more and more complex questions. For example, someone might want to know where on the Colorado Plateau over-grazing has the greatest potential to cause extinction for known and unknown (not-studied) species. After identifying these areas, we might want to determine which ones have been recently surveyed, which are home to endangered species, and which endangered species are presently found there. To give the results some political context, we might incorporate data representing individual grazing allotments. The results would be reported using both maps and tables.

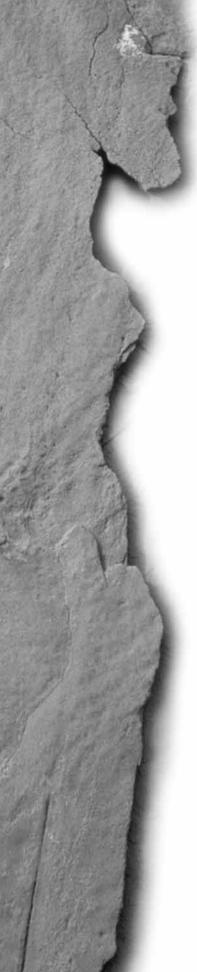
In the future, the GIS has the potential to aid our efforts in the area of rangeland management and restoration. Science-based principles and rationale could help guide us as we attempt to answer questions and solve complex problems with the use of many different data sets. Examples of such spatial data are "layers" that represent elevation, slope, soil type, land cover (vegetation type), and distance to surface-water sources such as springs. Some questions that might be asked are: Which areas are capable of sustaining grazing? Which of those areas are suitable for grazing, given a desire to restore and maintain a whole and healthy ecosystem? How many cattle can be grazed in which allotments this year? Next year? If the drought continues? If it doesn't?

Some experts feel the development of Geographic Information Systems is in its infancy. As of 2004, file-based systems are slowly giving way to the "geodatabase" model, making it easier to work with more detailed, highly accurate data sets.

The Trust looks forward to the maturation of GIS technology and the invaluable assistance it will provide conservationists as we navigate a course towards a more sustainable future.



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The publication of this issue of the *Colorado Plateau Advocate* marking the 20th anniversary of the founding of the Grand Canyon Trust would not be possible without the creativity and hard work of Joan Carstensen.

An NAU graduate with a B.F.A. in Visual Communications and Graphic Design, Joan has served as art director and graphic designer for the magazine since 1991. Under Joan's masterful direction, the publication has grown from a small newsletter to a full-fledged magazine distributed to our 5400 members twice a year.

Her company, Joan Carstensen Design, is located in the Trust headquarters at 2601 N. Fort Valley Road. When not employing her substantial creative talents, Joan enjoys hiking, cross-country skiing, kayaking, painting, and spending quality time with her family. To contact her please call 928-607-2019 or email joanc@infomagic.net.

Vision

We work toward a region where generations of people and all of nature can thrive in harmony. Our vision for the Colorado Plateau one hundred years from now is:

- A region still characterized by vast open spaces with restored, healthy
 ecosystems and habitat for all native plants and animals.
- A sustaining relationship between human communities and the natural environment.
- People living and visiting here who are willing and enthusiastic stewards
 of the region's natural resources and beauty.

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