

COURIER

NEWSMAGAZINE OF THE NATIONAL PARK SERVICE



VOL. 34, NO. 12

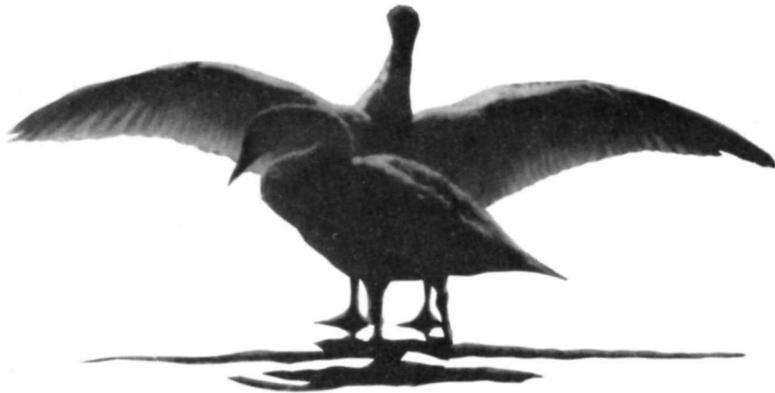
DECEMBER 1989

COURIER

NEWSMAGAZINE OF THE NATIONAL PARK SERVICE

Volume 34, Number 12

December 1989



FEATURES

- ECOSYSTEM MANAGEMENT FOR NATIONAL PARKS — 6
THOUGHTS ON ECOSYSTEM MANAGEMENT — 10
KEEPING THE COGS AND WHEELS — 14
EVERGLADES - WHERE DO WE GO FROM HERE? — 17
A NEW VISION FOR GREATER YELLOWSTONE — 20
HAPPY 90TH MR. WIRTH — 23

DEPARTMENTS

- COMMENTARY — 2
PARK BRIEFS — 27
NPS PEOPLE — 28
E&AA — 32

COVER

"El Capitan over Mrazek" is the work of Lew Wilson, Florida artist and photographer whose strong feeling for the Everglades is vibrantly reflected here. Wilson's hand-painted landscape photographs have been exhibited in 11 public collections and 43 permanent corporate collections in America and overseas. Reflecting on his Everglades photography, Wilson observes: "The photographer as artist really has his work cut out for him...to capture the vague, but very real and alluring, detail of this one-of-a-kind region." This photo and the others by Lew Wilson in this issue were generously donated for one-time use.

A party on horseback at Glacier NP's Boulder Pass is the subject of the back cover photo by George A. Grant. Like Everglades NP, Glacier is part of an ecosystem challenged by external stress.



STAFF

Mary Maruca — Editor
Ricardo Lewis — Art & Production

ADVISORS

George J. Berkley — Associate Publisher
Duncan Morrow — Contributing Editor
Theresa Wood — Executive Director, E&AA
Naomi Hunt — Alumni Editor

Editorial Offices — 202/343-4996

National Park Service
U.S. Department of the Interior



The Courier uses the desktop publishing technology of Apple Macintosh computers and printers.

A SPECIAL THANKS

Although the holidays are a time for celebration, they are also a time for reflecting on the year just past and a time for looking ahead. As I admire the tree outside my office with all of its attractive ornaments representing the units of the national park system, I would like to share a few thoughts and say a special thanks to all of you for your help and your contributions to the National Park Service this year.

Last spring when I was appointed Director, I came to Washington pretty much as an unknown commodity. Sure, the press and the official bio told you a little bit about me and my background; unfortunately, some of the newspaper and magazine articles weren't always accurate. However, whether I've worked with you directly or indirectly, I've felt you were making your own assessment with an open mind and I've found you all to be supportive. You have taken the opportunity to get to know me and given me the opportunity to get to know you.

With any new administration, everyone spends time getting to know new appointees, learning new work routines, and, basically, sizing the new administration up—its goals, direction, agenda. Being new myself, I've spent a lot of time getting to know both those in the Service and others in the Department of the Interior. I have enjoyed my first months in the nation's capital, but this isn't a job one can just ease into. There are always problems to be solved, budgets to be developed, management objectives to be set, and a lot of learning to do about the organization, the people and the processes. With your support, I believe we have successfully weathered these early months. And now that the learning curve is not quite so steep and things have shaken out organizationally in the Department, the real challenges of this job have begun. I am pleased to report that there is an excellent working relationship with Assistant Secretary Harriman and the team she has assembled, and Secretary Lujan and his staff. They have been most supportive and receptive. Of course, long hours, hard work, lots of pressures, and the usual share of bureaucratic frustrations are still part of the job, but, as I hope you also know from your own experience, it's a pleasure to be a part of this organization; the job is both satisfying and enjoyable.



One recent example of what makes our jobs so rewarding is a special event I attended at Antietam National Battlefield last weekend. This first annual Antietam National Battlefield Memorial Illumination honored those lost at the battle of Antietam by placing 23,110 luminaries across the park—one candle for each casualty. It's hard to express in words how impressive and moving an experience it was for me and others there to watch as dusk approached and the lights from the candles slowly, almost one by one, began to appear throughout the battlefield. Such events—especially those like this one—don't just happen. In this case, it took careful planning and preparation by park staff and the assistance of more than 300 volunteers to carry it out.

But it was more than just an example of a good park special event and how we really couldn't do so many things without the wonderful assistance we receive from volunteers.

In his remarks, Superintendent Rich Rambur welcomed the community and let them know that in a way this event was for them. He pointed out that they might often think that the park was for tourists but he made them see it as something that is a special part of *their* local culture and heritage, a place the community can feel involved with. It is this kind of public involvement and commitment that is so vital to the future of the parks. To those involved at Antietam and elsewhere, I offer our special thanks.

Thanks to you, I think a lot has been accomplished this year. But this is not an organization that rests on past laurels. I look forward to working with you on the challenges and opportunities that the new year and the last decade of the 20th century will most certainly hold.

Best wishes to you, your loved ones, and friends for a happy holiday season and a healthy and fulfilling new year.

James M. Ridenour

FROM THE EDITOR

On one of those rare occasions when I had the opportunity to escape Washington, I took with me a copy of Bill McKibben's new book, *The End of Nature*. Long plane rides are gifts to those who seldom find time to read anywhere else, and so, in the quiet hours before my plane landed, I began a volume that the dust jacket placed in the "landmark tradition of *Silent Spring*"—and when I finished I hoped its impact would be the same.

McKibben's work is not comforting. It is not the sort of thing to read if you are looking for a happy ending. About the only consolation offered by the author is the slim chance, the almost missed opportunity, that we as individuals, as members of a community, as members of the *world* community, may still have time enough (measured in years, not decades) to take our hands off the workings of nature and allow nature time (centuries perhaps—our damage has gone that deep) to circumvent our intrusions and return to its own preferred settings.

The crux of McKibben's argument is painfully simple. He observes: "The greenhouse effect is a more apt name than those who coined it imagined.... We have built a green house, a *human creation*, where once there bloomed a sweet and wild garden." Because we have dabbled and dabbled, injected this and that into the mixture that was once the natural world, we have made ourselves the chefs of creation, wearing the hats, calling the shots. And because we have done this, nature has lost its independence—become tamed and pitiful, with only ourselves to protect it.

So here we stand at the end of the twentieth century in a very isolated spot, the voices of all that are endangered and once wild fading from around us. Soon indeed, McKibben hypothesizes, we will hear only our own voices and see only the imprint of our own hands: "a child born now will never know a natural summer, a natural autumn, winter, or spring. Summer is going extinct, replaced by something else that will be called 'summer.' This new summer will retain some of its relative characteristics—it will be hotter than the rest of the year, for

instance, and the time of year when crops grow—but it will not be summer, just as even the best prosthesis is not a leg."

Flying high above the clouds on that stunningly beautiful day and reading this book, I began to ask myself the sort of questions McKibben's observations encourage—started wondering if it was too late for me to provide my son with a home where he could grow up surrounded by the natural world, considered whether the reliable cycles of nature had been lost before I was fully aware they were in danger, pondered whether the colorful sunset that delighted me so beyond the windows of my plane had ceased to possess that indefinable something that made it natural—wondered and wondered and wondered, and feared.

Of course, if McKibben is right and nature, reliable and constant, has been lost to us, future generations may not be the wiser. Lacking a relationship with the natural world, they may have little understanding of what has been taken from them. Hotter summers and warmer winters, fewer trees and a less predictable climate may simply represent another necessary challenge.

This is not to say that those in this agency and elsewhere—from President Bush to the youngest child who enjoys outdoor play—have not and will not continue to express their love and commitment to the planet. It's just that the need now appears so great, the time so short, and the changes in the environment so dramatic as to require greater sacrifice.

Perhaps the somberness of McKibben's book is merely part of the anxiety that attends the conclusion of a century. Perhaps in a decade we will chuckle at the enormous concern that has fueled this and other forms of public environmental awareness.

Or perhaps not. A lot can happen in ten years, either for or against the planet, and the risk of inaction is considerable.

Although this is December, the celebratory month, the month of gift-giving and good will when we bring nature inside to festoon stair rails and archways, the *Courier* has scarcely a word to say about the holidays. Rather the focus is on ecosystems in this issue, because that is part of what the Park Service can do to help maintain the

integrity of the planet. And so James Agee and Darryll R. Johnson explain some of the complexities of ecosystem management. Brace Hayden discusses Glacier's efforts to work with all those responsible for managing portions of the Crown of the Continent ecosystem. Wayne Brewster's "Keeping the Cogs and Wheels" decries tampering with intact ecosystems. Nat Reed shares some profound words concerning conditions in Everglades, and Ed Lewis looks to the future of the Greater Yellowstone Coalition.

All in all, these are not cheerful Christmas topics. However, this issue of the *Courier*, suggested by Amy Vanderbilt (Glacier NP's public information officer), is a Christmas offering of another sort. What it pertains to is the kind of gift all of us receive from those who struggle to preserve the way nature works independently of our actions—a gift that comes wrapped in a fervent desire that the future will challenge the statistics, that wherever we stand on the first day of the next century, we will know that cool green spaces exist close at hand, perhaps not abounding but at least continuing.

Personally, I hope, in the light of that new dawn, one of the last essays of E.B. White will still have meaning: "...with so much disturbing our lives and clouding our future...it is hard to foretell what is going to happen....But I know one thing that has happened: the willow by the brook has slipped into her yellow dress, lending, along with the faded pink of the snow fence, a spot of color to the vast gray-and-white world. I know, too, that on some not too distant night, somewhere in pond or ditch or low place, a frog will awake, raise his voice in praise, and be joined by others. I will feel a whole lot better when I hear the frogs."

1989: NATURE'S MOTHERLY TURBULENCE AND CALM

Dixie

Positive proof of whether wacky, but fading, 1989 was a personal "hit" or a "miss" for this key-puncher will be most evident next year when you ogle this space and spot my byline—or not.

If you don't, it may be due to the fact

that my travel agent managed to get me on a relay squadron of those self-destructing DC-10s to transport me to my Arizona desert trip in November. If one of them doesn't toss an engine somewhere, there's always the playful wind shears at Dallas' airstrip. That's why Her Editorship always wants this column keyed before I leave on one of these journeys. If I land wheels-down, then she wants postcards. (Just in case: All aspiring columnists may ready their sample jottings to send WASO.)

Circumstances cancelled my scheduled tour of Isle Royale-Voyageurs, so instead I have fulfilled my January column's "Resolution" by plotting a One-Site-a-Day trip east and south of the Valley of the Sun, one of the last portions of USA geography I've never before set a sneaker on. Sort of "natural wonder" vitamin pills for a weary urban psyche—eight new areas added to my career-NPS list, plus the privilege of seeing those giant cacti before poaching scum swipe the rest of them.

Naturally I, alias Photo Hun, doing a llama impersonation, had three cameras in tow, thereby assuring my local camera store owner of a Lincoln Town Car for Christmas. I'll be marking slides until Spring Training. Multiplying like yellow Trek tribbles, unmarked Kodak boxes of the Great Northwest '88 adventure still hide in my living-room rubble.

Speaking of rubble, Mom Nature wasn't alone in creating havoc these last 525,600 minutes. "Democratic thought" was often responsible and in some unusual places. Of major historical note, China got its zillions of freedom-seeking feet wet (unfortunately with blood) this spring, while we now face winter with Europe's infamous Cold War "Iron Curtain" threadbare at best. Aside from the normal "home front" affronts, we were probably most awed (or O'ed) by Hugo, 'Frisco and the O's. The big ill wind blew our stuff around at Virgin Island NP before slamming into Forts Sumter and Moultrie head-on. According to Jim Howard, Southeast PAO, reports from Cinnamon Bay say the scenery is still stunning, and there might even be more sand on the beaches. Though soggy and littered with debris, the old forts toughed it out better than the surrounding modern structures.

Meanwhile, at Golden Gate NRA, Point Reyes, Pinnacles and John Muir's

House and Woods there was some unexpected "Shake, Rubble and Roll!"

Ostensibly ostracized for being oblivious and occasionally obscene in 1988, the oafish Orioles openly outflanked and overwhelmed opponents until orphaned by Olympus, at once oxidizing as our old ozone, but offending only oddballs. Not obnoxious A's or opaque J's, the organic O's orb oscillates toward opportunist Osiris for '90.

Way up here, in the North Atlantic Region, we had it quite nice, thank you! Nothing too extreme, and enough soaking rain that though we had to survive a rare double hatching of Voracious Mosquitos From Hell, we also got rich green foliage, even into late September, so rich that when they were bathed in strong sunlight we had to squint or look away from the sparkling leaves.

Close Was Apparently Too Far

My November trip of 1,000 road miles through the southeastern quarter of Arizona now means that I've toured some portion of the Grand Canyon State in 1973, '74, '76, '80 and '89, while not really setting a firm foot on any Cape Cod Seashore beach until just two months ago. (This record was achieved after living in Beantown for more than 20 years and the state for 40-plus.) The drive out to Salt Pond Visitor Center covers about 100 miles. Though I was on the Cape for a mere 36 hours, it was one of the most spectacular weekends of '89.

Despite being October, Nature's ocean forces were completely calm. Only scattered puff breezes meandered the seascape. Mild temperatures made camping a joy, and a cloudless sky demanded that shorts and a T-shirt be the comfortable uniform of the day and night.

With thousands of daily summertime "guests" back at their home addresses, park roads and beaches were nearly empty. Just after dawn at the Provincelands Visitor Center, as I looked out over the sun-drenched dunes and grasses, the cliché came to mind: "It was so quiet, it was deafening!" I logged in all obligatory points of interest, hiked a few trails, picked up beach litter and took my absurd number of pictures—some of which may be seen in these pages in 1990. It was well worth the wait. Now it will be easier to go a second time.

School Days, School Daze

The Good News is that children are back in school. The Bad News is their homework is getting to moi—literally.

Because of those well publicized test results that show most American kids can't find California on a map or name the two oceans we live between, well-meaning teachers launch this type of homework annually and our mail box is being filled more and more with requests for "school project information."

Since NPS stuff is free, we are sitting ducks for every geography, history and social studies teacher who tells his/her class to write us for information. Trouble here are those scribbled and incorrect addresses. We get 'em from all over, but most of the info they need we can't supply. I guess teachers think that we have this stuff warehoused. It seems as if no matter what they put on the envelope (Boston Tourism Bureau, Massachusetts Tourism Office, Bureau of Wildlife, and multi-combinations of same) kids always stick our NARO zip code on the end and that's what the wonderful US Postalites go by—so, we get the mail. Believe me, the "forwarding" process is getting stale.

In a related vein, a friend from my central Massachusetts hometown called last week so her son could ask me to send *him* information on Shenandoah NP for a project on national parks. (Now THAT IS our business.) He thought it was "neato" that his Mom knew "a park guy," and he could sit back and practically have the work done for him. Well considering his source of top-notch help, I put a little pressure on by informing him that he was "dead meat" if he got less than an "A." Mother reports he made the grade.

Finally, if you felt badly about doing something really stupid this year, take heart! A Virginia woman visiting Acadia NP in August triumphantly hiked the strenuous, aptly named Precipice Trail. When finished and back on safe flat ground she jumped up shouting, "I made it!" and, yes, sprained her ankle and needed ranger assistance. Anybody hear Paul Harvey use this gem??

Joyous holidays to the entire NPS family spread nationwide. So that 1990 is a safe. Happy New Year, always take heed of the Sarge's sage advice. "Let's be particularly careful out there!"

NOTES FROM THE HILL

Gerry Tays

Unless you have been totally out of touch with reality over the past six or eight months, you no doubt are aware that the Everglades is in serious trouble, due in part to problems involving both the quality and quantity of water that finally enters the park from the north. You will be pleased to know that both House and Senate Committees have begun action that addresses these problems. The Administration testified in favor of adding 110,000 acres of the Northeast Shark River Slough that is now outside the park boundary, but conditioned its support for the legislation in part on Congressional willingness to address the issue of water quality—the expansion being primarily an issue of water quantity. The House Committees on Interior and Insular Affairs and Public Works and Transportation as well as the Senate Committees on Energy and Natural Resources and Environment and Public Works have each considered the bills, with all but the latter Senate committee having taken a position on the work to be accomplished by the Army Corps of Engineers and on who will pay for it. The Administration was also concerned that the bills' 80/20 (federal/state) split in land acquisition costs was unfairly skewed and should be 50/50. Some action on the bills is expected before the end of the first session of the 101st Congress.

The proposed California Desert Protection Act of 1989 has been the subject of both House and Senate hearings at which BLM testified on behalf of the Administration in strong opposition to the proposal. If enacted, the bills would designate 81 wilderness areas under BLM; add 1,250,000 acres to Death Valley NM, rename it as a national park, and declare 3,159,720 acres wilderness; add 230,000 acres to Joshua Tree NM, redesignate it as a national park, and designate 133,500 acres wilderness; establish a 1.5 million-acre Mojave NP from BLM land and designate 747,940 acres wilderness; and establish a 490-acre Indian Canyons NHS on private and Indian land, authorize the Department of the Interior to acquire lands by exchange, and authorize

management by Agua Caliente Band of Indians. It is uncertain at this time whether these bills will be acted on before the end of the 101st Congress. Field hearings were held in Bishop, CA, on the House bill on October 28th and November 11th.

President Bush recently signed bills creating the system's 355th unit (Ulysses S. Grant NHS in St. Louis) and expanding Harpers Ferry NHP in WV, MD and VA. He also signed the FY 1990 Appropriations Act (PL 101-121) on October 23rd. This latter action, however, has been clouded somewhat in that subsequent events have triggered the much maligned, feared, misunderstood Gramm-Rudman-Hollings deficit reduction measures requiring automatic sequestration of approximately 5 percent across-the-board in NPS accounts. At press time we are assured (probably not the best choice of words when it comes to dealing with Congress) that these reductions will be restored, or, in the worst case, that the reductions will have minimized impact due to partial restoration. Let's look at the FY 1990 budget before the impacts of Gramm-Rudman-Hollings are calculated. Don't spend these dollar amounts just yet, however. Highlights of the Act follow:

Amounts appropriated for Operation of the National Park Service (ONPS) total \$778,419,000; the Administration had proposed \$767,240,000. Included in this total is the intention that "each park should receive no less than a 5 percent increase over FY 1989 while capping the increase for individual parks at 15 percent for all but new or expanding parks." Approximately \$32 million above the FY 1989 level was included at the park level to allow for these intended increases.

While the Administration proposed no funding for the Youth Conservation Corps, Congress directed that \$1,000,000 be found within available funds for the program.

The sum of \$34,464,000 is earmarked in the BLM FY 1990 budget for NPS firefighting activities, including 1990 firefighting costs as well as repayment of 1989 costs. The Administration budget proposed \$12,626,000.

The Act specifically prohibits the development of a formal environmental impact statement related to the reintroduction of wolves in Yellowstone NP. Funds are provided, however, for

studies related to this program in the amount of \$175,000.

By January 1, 1990, the Service must provide the Committees a plan for reducing Servicewide administrative costs. Under the general category of administration, the Congress reduced funds available for WASO (\$131,000), regional offices (\$171,000), automatic data processing (\$134,000), and executive direction (\$250,000) while increasing funds for GSA space rental (\$455,000) and retirement systems (FERS and CSRS: \$2,000,000). At the park level, a reduction of \$500,000 is included for in-park management. Funding for national recreation and preservation programs, many of which are characterized as "out house" programs, was increased by a total of \$5,932,000.

As usual, the greatest discrepancy between the Administration's proposed budget and that contained in the final bill presented to the President falls in the category of construction and related planning. The budget submitted to Congress contained \$44,112,000 in projects. The final tally amounts to \$199,716,000, including an increase of \$133,412,000 in line item construction, \$2,500,000 in lump sum emergency and unscheduled projects, and \$19,692,000 in advance and project planning.

Land acquisition funds, always a contentious issue between recent Administrations and the Congress, received a \$19,097,000 increase to \$88,556,000 by Congress. This includes \$16,700,000 for state grants not included in the President's budget.

The President had recommended no funding for the Historic Preservation Fund, which provides funding to the States, the National Trust for Historic Preservation, Indian tribes and external organizations. Congress included \$32,750,000 in this program category.

NPS totals for the FY 1990 Appropriations Act—for which the President recommended \$906,208,000—totaled \$1,171,484,000. As we said earlier, though, don't spend it all just yet.

LETTERS

I'm tired of blaming the "system" for NPS management problems. Some of us think that the mission of the National Park

Service is worthy of putting in a lot of time and effort. If I happen to believe that, then as a supervisor one of my roles is to help the Service solve problems. I ought to be part of the solution. If there are some perceived problems with the way we are organized or how good a job we are doing, then I should be helping to solve those problems rather than blaming the Service or OPM or the system.

Good position management is one tool we have for solving problems. However, as supervisors, we rarely give much thought to how our positions are managed or our staffs organized. If things always have been done a certain way, then we tend to think that is the way they should continue to be handled. Once in a while, if a position becomes vacant, we give thought to some position management. Otherwise things rarely change.

Recently I had the great pleasure of participating in the Service's Position Management Workshop. The basic charge was to develop a training course that could be taken back to the regions and parks and presented to supervisors. The guiding principle of the course is organization to optimize the amount of work being done, while minimizing the confusion and effort on the part of employees.

It was exciting to be part of this project. Developing the first course for supervisors on the subject of position management was rewarding endeavor.

Have you ever thought about what a "layered" organization looks like? Imagine passing your ideas up through six or ten supervisory layers before you reach someone who can make a decision about them. Also, imagine yourself as the decisionmaker who has to reach down through the same supervisory layers to get ideas implemented. The big problem with a layered organization is that ideas don't float up or down through the organization.

Or think about the situation where we "design a position around a personality." If someone has trouble handling a job, we rarely release that person. Rather, we take alternative measures. We may give the person an assistant who actually does the work, or we may create a position for the non-productive person to occupy so that we can recruit a more competent person for the original position. We all know that this occurs. We know that it is unlikely to change. But, we should at least recognize the situation for what it is, and revitalize the position once it does become vacant.

Don't we all have enough to do without worrying about such administrative matters? Yes indeed, but having ourselves organized effectively will help keep NPS in the forefront of public respect in the next decade. That respect will translate into conservation of park resources.

If we are to manage park resources, then we must do a professional job of it. This leads us to conclude that we must be qualified as professional resource managers.

In this capacity, we must look closely at the way we recruit new employees into the Service. Is our current approach meeting our park resource management needs? How about the lack of accountability in some of our field park ranger jobs? Have we thought about how to structure these jobs so that the rangers are responsible for a program?

Is it better to have a specialist or a generalist maintenance staff member? Should a maintenance vacancy be filled by a carpenter or by a maintenance worker?

Making work easier and more effective is an important principle of position management. Another aspect is career development. If you as a supervisor can organize responsibilities into career ladders you provide fertile ground for employee growth and development.

Are we looking at the way we organize our work with these thoughts in mind? Or, are we organized the way we are just because we have always done it this way?

In addition to these concepts, there are a lot of other interesting ideas reflected in position management. Consider, for example, what is a "fragmented" organization. Do you know why a unit that has too many people for the work load tends to do less work and cause more supervisory problems than one that has too few people and too much work? Why is it that any time you create a new subdivision, that subdivision grows to require more funds and human resources?

These and other fascinating questions will be answered by position management training. Come to the course.

Then join me in being part of the solution.

Dick Martin
Wrangell-St. Elias NP & Pre

With a critical eye for safety, I am always examining candid photos for safety violations. Most violations I note are minor, so I do not call them to the

attention of anyone. However, the park employee pictured in the September 1989 issue of the *Courier*, working on Scottys Castle, is in danger of losing his eyes. Using an electric diamond blade saw without safety goggles or glasses is foolish.

Kenneth R. Rueff
DSC Safety Engineer

BOOK & TAPE MART

The Grand Canyon Natural History Association now has available *Canyon Lifesongs of the Colorado Plateau* on audio cassette. The tape is the work of Rita Cantu, a park ranger at Guadalupe Mountains NP and recipient of a grant from the Horace Albright Employee Development Fund, which, in conjunction with the natural history association, made the tape possible. The cassette retails for \$9.95 at association book stores.

Great American Lighthouses by F. Ross Holland, Jr., Preservation Press of the National Trust for Historic Preservation (1785 Massachusetts Ave., NW, Washington, DC 20036), 350 pp., \$16.95. (Just in time for the 200th anniversary of the founding of America's lighthouse system, this guidebook is organized by region and heavily illustrated. It describes more than 300 lighthouses and lightships nationwide.)

Stars Over Montana: Men Who Made Glacier National Park History by Warren L. Hanna. Glacier National History Association. \$23 (includes postage and handling). (Accounts of those who shaped the history and the territory of the area now known as Glacier National Park.)

Cliffhangers: The Life of the Rocky Mountain Goat. Marty Stouffer Productions. VHS. 28 minutes. Glacier National History Association. \$33.95 (includes postage and handling). (Taken from Marty Stouffer's Wild America series on PBS television, the video follows a band of Rocky Mountain goats through a year in the park.)

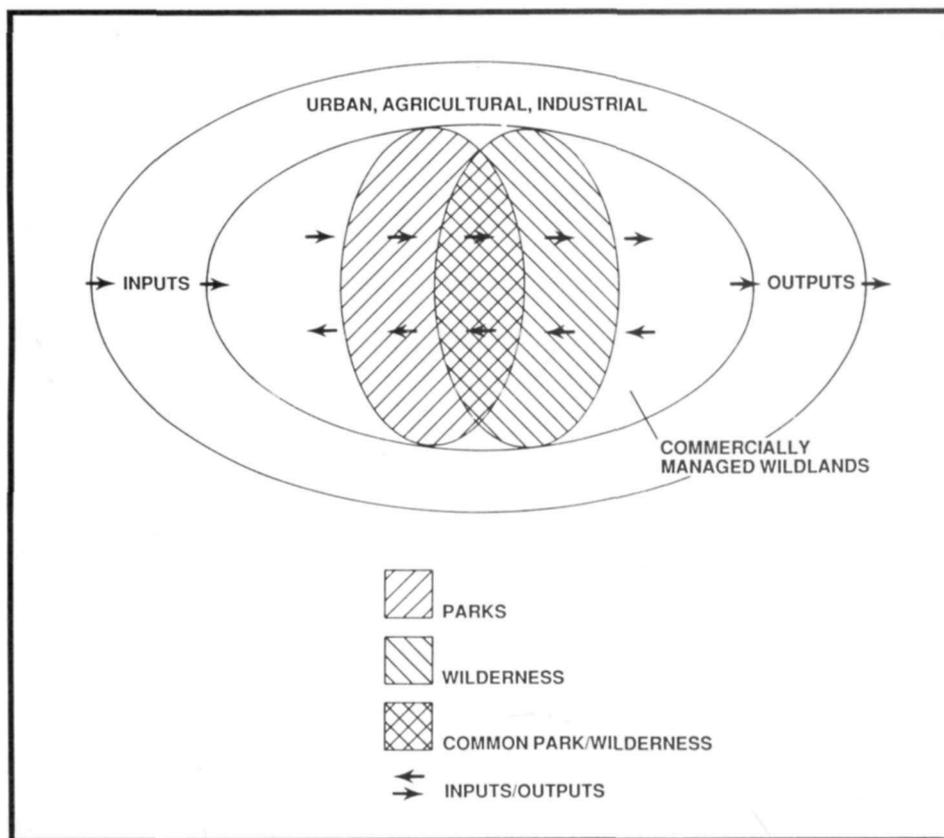
ECOSYSTEM MANAGEMENT FOR NATIONAL PARKS



The wildflower displays in Paradise Meadows at Mount Rainier are the focus of the multi-million-dollar visitor center. The small trees scattered across the meadow invaded during a short-term natural climatic warming in the 1920-40 period. With global climatic change due to the greenhouse effect, more rapid tree invasion is likely.

INTRODUCTION. The recent National Parks and Conservation report, "National Parks: From Vignettes to Global Views," enthusiastically endorses ecosystem management as a philosophical and technical basis for stewardship of the national park system. However, park managers may have only partial knowledge of the concept of ecosystem management or conflicting ideas about it. Put simply, ecosystem management is a process by which lands are managed in relationship to adjacent lands. National parklands can be the "core" of such networks, but the concept of ecosystem management is just as applicable to lands managed for timber production, quarried for minerals, or opened to any consumptive use.

A prime difficulty in understanding ecosystem management results from attempts by many interest groups to capture the phrase and use it as their philosophy, thus encouraging



Relation of park and wilderness ecosystems to neighboring landscapes.

semantic confusions similar to those created by “diversity,” “stability,” and “carrying capacity.” Such attempts ultimately produce definitions that exclude people from ecosystem management. The term becomes a buzzword for park expansion, and an approach associated only with lands managed for “natural” value.

What we propose here is a new direction for park management—a new direction based on the ecosystem management process. Properly understood, ecosystem management can be a valuable tool with such potential benefits as:

First, the focus on interrelations of system components should be helpful in avoiding negative and unintended consequences of management actions. Second, if parks and wilderness areas are treated as “open systems,” rather than “islands,” the influences of these areas on external systems (and vice versa) should be more apparent. Third, a systems approach will help focus attention on important, long-term issues and avoid a continual “brushfire” approach to decision-making. With the characteristic high turnover rate for managers in these areas, this benefit will encourage continuity and persistence in management efforts. A systems approach will also identify social systems as critical components of these ecosystems, helping to legitimize the role of culture and values in problem identification and solution. (Agee and Johnson, 1988)

KEY ELEMENTS OF THE ECOSYSTEM CONCEPT. Systems

that contain living organisms frequently are called ecosystems. Ecosystems have boundaries, but the boundaries are arbitrary. The simplest working definition is any part of the universe chosen as an area of interest, with the line around the area being the ecosystem boundary and anything crossing the line being input or output. In this case, the ecosystem of interest happens to be a national park with an adjacent contiguous wilderness area.

One of the key elements of the ecosystem concept is that different ecosystem components (e.g., the elk range versus the range of an owl species) will have different boundaries, implying a set of overlapping and interacting systems. Wildlife or water management problems will influence, and be influenced by, adjacent land uses and social values.

Another important aspect of the ecosystem concept is that no natural balance or static equilibrium is likely to exist over a very long time period. Although periods of stability may occur, national parks are nonequilibrium ecosystems; the constant in these systems is change. Plant species in today’s parks are a reflection of past climatic shifts and differential migration rates, rather than some past equilibrium vegetation mosaic. With potential global warming on the horizon, accelerated man-caused shifts in the vegetation mosaic are possible. Similarly, equilibrium levels of animal populations are infrequently maintained over any meaningful time horizon.

An understanding of the ecosystem concept suggests that park resources management is the management of change,

where the basic values and knowledge underlying management may also change.

FROM NATURAL PROCESS MANAGEMENT TO ECOSYSTEM MANAGEMENT. Park management began to shift from object management (protecting individual trees or animals) to the management of natural processes in the 1960s, particularly with the active management of fire. The phrase “natural process management” became a popular way of explaining this new management philosophy. Compared to earlier management strategies, natural process management was enlightened. It incorporated much information available in the physical, biological, and social sciences.

In recent years, there has been considerable discussion of new directions for resources management in national parks, including controversies about Yellowstone (even before the fires of 1988) wildlife and vegetation management, and burning in the giant sequoia groves of Sequoia and Kings Canyon. The common thread in these controversies is a questioning of park management’s primary goals, which are neither easily enunciated nor agreed upon by all groups interested in the future of parks.

Preservation goals should be viewed in a regional framework, looking at larger, regional goals for biodiversity. Parks are a part of the solution, part of a network of lands that are managed for multiple goals — not just preservation goals.

The dilemma we now face has been created by the evolution of biological and social scientific thought in this century concerning how ecosystems and their components—among them the plants, animals and people—function. Scientists are realizing that many implications of their research, as that research pertains to parks and wildernesses, require policy decisions more value driven than directed by scientific fact. Past and present human interaction with these nature preserves is often very significant. Just as significant are the probable future impacts of humans, because of their demands for the recreational use of such areas and the impacts of their adjacent activities on the “preserved” ecosystems.

Because of human impacts, parks and wildernesses can no longer be considered ecological or social islands. They are inextricably tied to neighboring areas—for better or worse. We cannot rely on natural process management as the *only* means of achieving natural area goals because these areas are not, in a cybernetic or systems analysis context, *closed* systems. The “walls” of park boundaries are political realities, yes; but social, economic, or biological barriers, no!

Consider the effect of global change, clearly a human-induced phenomenon, and one which will occur in but a fraction of the lifetime of some park organisms. The range

and timing of change is subject to debate but most scientists agree a global warming is likely. In the Pacific Northwest, the seasonal snowline, by some projections, is anticipated to increase from 2,900 feet to 4,900 feet. The meadows of Paradise at Mount Rainier, under such a scenario, will be potentially forested sites; the desert sagelands of Oregon will be approaching the Crater Lake rim, now dominated by subalpine forest. Serious ecological problems due to human-induced change are on the horizon. Our current management models are not adequate for conceptualizing the interactions of all the variables.

PREREQUISITES TO EFFECTIVE ECOSYSTEM MANAGEMENT. Preservation goals, although worthy, are elusive. First, in many situations, separating natural from human-induced change is nearly impossible. “Natural process management” or “natural regulation” is no longer a comprehensive, all-inclusive management model. The organic legislation of the National Park Service is, of course, still applicable: “to conserve the scenery and the natural and historical objects and the wild life therein.” But it must be considered along with newer legislation, including the Clean Air Act, Endangered Species Act, and the social, political and economic contexts in which day-to-day management decisions occur.

Second, preservation goals should be viewed in a regional framework, looking at larger, regional goals for biodiversity. Parks are a part of the solution, part of a network of lands that are managed for multiple goals—not just preservation goals. Ecosystem management is not intended to be a threat to adjacent land managers, nor a deliberate compromise of park and wilderness values. Rather, it recognizes that the boundaries of parks are permeable membranes, and that cooperative management approaches are most likely to maximize the preservation of the values for which these areas were established, given the inevitable changes foreseen in and around them. Cooperative solutions, however, can only be reached if participants realize that different agencies and other interested parties have different mandates or interests, and objectives to which all must be sensitive.

Finally, a four-part ecosystem management strategy is envisioned: First, define precise objectives for the area included, that incorporate our knowledge of the natural world and recognize that humans are a part of both problems and solutions. Threshold management goals may be established by legislation. Goals may also be site specific and articulated in view of the regional ecosystem. Second, define components of concern, each of which may have a different boundary overlapping adjacent lands. Third, develop cooperative management strategies. Fourth, monitor the effects of such strategies.

Because the concept of ecosystem management is poorly understood, training will be an important element in transition to this approach. Training should be oriented to top executives as well as representatives from management units. Training sessions could be interagency meetings in educational institutions that would serve as neutral sites. We emphasize, however, that there are no road maps outlining a



Low intensity prescribed fires have been used for two decades in several national parks. How widely should this practice be applied? Certain forests are well-adapted to this type of fire; others would be very difficult to burn using low-intensity prescribed fire.

transition to ecosystem management. Perhaps a first step is an interagency project to create training modules.

Although the model of ecosystem management offers significant potential to park and wilderness managers, it is not a panacea. For example, a benefit of the ecosystem management model is that it offers a systematic way of identifying complex interactions in situations where several management concerns may be present. Complexity can be overwhelming, especially if less-than-perfect information is available. The net result might be to slow down or paralyze the decision-making process in the absence of good scientific data.

CONCLUSIONS. The future for management of the various components of parks depends on the direction of overall resources policy and coordinated management strategies more than it does the technical refinements possible in the various disciplines of wildlife management, air quality modeling, or fire behavior prediction. Many management decisions will not be scientific ones. Rather, they will be value judgments within the broad range of those allowable under the National Park Service Organic Act and the Wilderness Act. The changing physical, biological, and cultural environments in and around truly great natural preserves will force us to define

Publication

The concept of ecosystem management as applied to parks and wildernesses was the subject of a 1987 workshop attended by 33 researchers and land managers at a University of Washington retreat. The workshop results appeared in 1988 in a publication titled *Ecosystem Management for Parks and Wilderness* (ISBN 96817-6), available from University of Washington Press, P.O. Box 50096, Seattle, WA 98145-5096.

more specifically the values we wish to preserve and actively pursue them with our neighbors. Otherwise, we are likely to see them erode.

As the golden anniversary of the Wilderness Act approaches in the year 2014, and the Organic Act centennial in 2016, we should be looking back at the wise choices we made in the 1990s. The ecosystem management model can be an important tool in reaching these wise decisions.

James K. Agee is a professor with the College of Forest Resources, University of Washington. He was formerly an NPS research biologist. Darryll R. Johnson is a research sociologist with the NPS Cooperative Park Studies Unit at the University of Washington.

THOUGHTS ON ECOSYSTEM MANAGEMENT

In the Yellowstone area, citizen frustration over inconsistent and often conflicting land management activities among public agencies led to the formation of the Greater Yellowstone Coalition, a public interest group. Concurrently, recognition of the need for improved management cooperation intensified the efforts of the Greater Yellowstone Coordinating Committee, a governmental organization composed of top Park Service and Forest Service managers.

Like Yellowstone, Glacier NP is no stranger to problems that are ecosystem-wide. Glacier's vulnerability was highlighted in the 1980 State of the Parks Report that listed 56 threats to the park's natural and cultural resources, many originating outside park boundaries. Most were not short term threats either. Instead, they are long-term issues that must be evaluated and reevaluated in context to decide where the activities they represent can occur appropriately within the ecosystem of which Glacier NP is a part.

While ecosystem management may be a relatively new term, Glacier NP officials have practiced aspects of ecosystem management for years. Park officials are actively involved in such forums as the Flathead Basin Commission, the Interagency Grizzly Bear Committee and the Montana Bald Eagle Working Group. Each of these interagency committees seek to resolve specific resource issues that do not stop at agency administrative boundaries.

The Flathead Basin Commission, for example, includes 15 agency and 6 public members charged with protecting the high quality of the basin's aquatic environment. Because of its huge land base, including key headwaters, Glacier NP plays a vital role in fulfilling this mandate. The Basin Commission can look back on a number of recent successes, including campaigns to require local communities to install tertiary waste water treatment facilities and the passage of local regulations to prevent the sale of phosphorus-based detergents within the basin. The Basin Commission was also successful in designing and implementing a comprehensive aquatic monitoring program for the basin, a plan that requires substantial staff and fiscal resources from agency members.

The North Fork of the Flathead River forms the western boundary of Glacier NP and has its headwaters in British Columbia. The International Joint Commission (IJC) recently completed a three-year impact assessment of a large open pit coal mine proposed in British Columbia near Glacier's northwestern border. Glacier NP, through its participation on the Flathead Basin Commission, helped assure that this assessment was funded, and that members of the

park's science division were active participants. Later, after reviewing the IJC's findings, Glacier's superintendent played a key role in helping shape the Basin Commission's position opposing construction of the mine.

The IJC has recommended that the mine not be approved until potential impacts to the river's waters, sport fishery and other amenities could be reduced to the satisfaction of both countries. Furthermore, it recommended that both governments consider opportunities for defining and implementing compatible, equitable, and sustainable development and management strategies in the North Fork drainage. Initial discussions of such strategies have commenced among park staff, local citizens, the U.S. Forest Service, the Flathead Basin Commission, and representatives of the Province of British Columbia.

Park officials actively participate in the U.S. Forest Service's planning and impact assessment processes for Forest Service lands surrounding Glacier NP. Potential impacts to park resources are conveyed early in the process since Glacier staff members participate on Forest Service analysis teams. This practice has led to some successes in the location and timing of timber harvests so as to minimize impacts to winter range and wildlife travel corridors. The park is now making similar efforts with regards to the siting and mitigation of oil and gas development on public lands adjacent to the park. Such processes are not yet in place for oil and gas development on private lands adjacent to the park.

Marking the park's the western boundary, the North Fork has been designated a Wild and Scenic River by Congress. Primary responsibility for managing this river lies with the U.S. Forest Service. Together, the Flathead National Forest and Glacier National Park have developed a management plan that emphasizes maintaining the river's free-flowing character and undeveloped shoreline.

Many private landowners in the North Fork Valley have cooperated with Glacier's goal of trying to maintain the wilderness-threshold characteristics of the area. In recent years such private lands have come under increasing subdivision pressures, forcing landowners to request the creation of a local planning unit from Flathead County. This eventually resulted in the preparation of a land use plan that emphasizes preserving open space and protection of water quality and

Upper Kintla Lake in the North Fork area of Glacier NP. Long Knife Peak is visible on the far right. NPS photo by George McFarland.



fisheries via such methods as establishing minimum lot sizes, encouraging cluster development, and discouraging development in riparian areas. In addition, some private lands adjacent to the river have had conservation easements placed on them or have been purchased outright, using funds allocated to implementing the Wild and Scenic River Act as well as funds from other public or private sources.

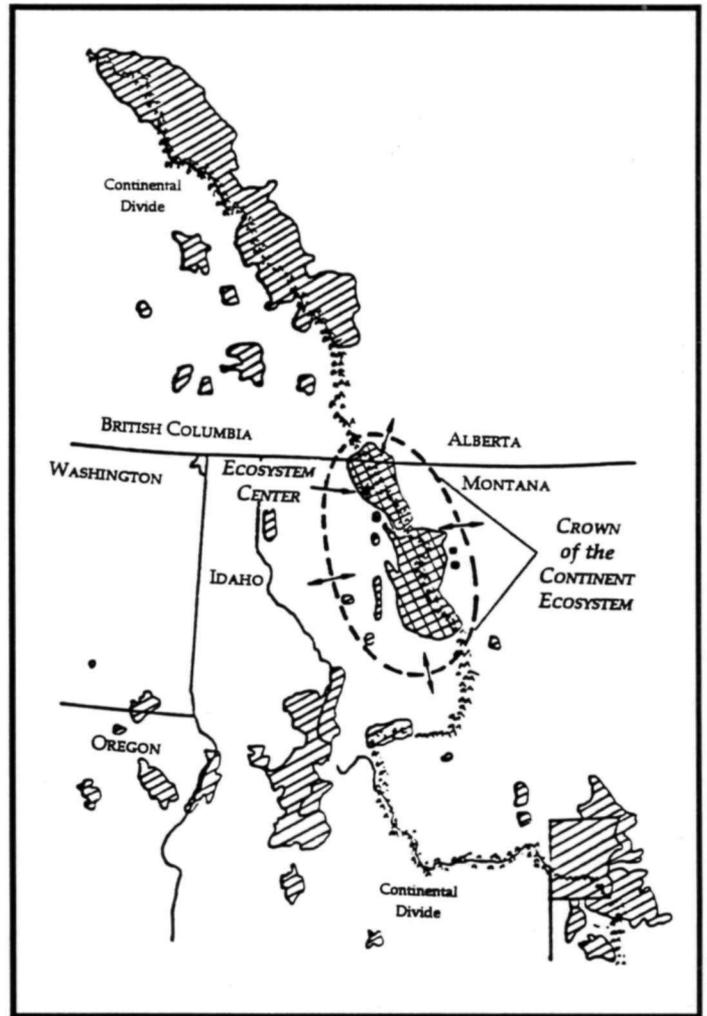
To the east of the park on the Blackfeet Indian Reservation, park biologists have been quietly supporting tribal government efforts to establish a big game hunting season, thus ending the practice of allowing year-round hunting by tribal members on lands immediately adjacent to the park. Such a step would not only provide a safer and more viable winter range on reservation lands, but, ultimately, new economic opportunities for the tribe.

Improved information storage and retrieval is one of the key issues for NPS officials if they are to become increasingly successful at influencing management decisions made elsewhere in the ecosystem. In this regard, Glacier has acquired Geographic Information System (GIS) capabilities that are significantly strengthening the park's ability to access and analyze such ecosystem components as visitor use, fire ecology, trends in air and water quality, and bald eagle use both inside and outside the park. Members of the park's science division have been working with their Flathead Forest counterparts to develop thematic planes for overlays supporting interagency resource analyses.

The ecosystem of which Glacier NP is a part often is referred to as the Crown of the Continent, a name given it by the early explorer, George Bird Grinnell. The Crown of the Continent encompasses the headwater reaches of three of North America's major rivers: the Missouri, the Columbia, and the Saskatchewan, all of which originate on Triple Divide Creek in Glacier NP. Glacier and Waterton Lakes National Parks and the adjacent Bob Marshall-Great Bear-Scapegoat Wilderness Complex are at the approximate center of a string of specially designated public lands that stretch from Jasper National Park in Canada to the Grand Tetons in Wyoming.

Growing recognition of the ecosystem management concept and of the ecological and economic values of the Crown of the Continent area has prompted a small group of local citizens and federal officials to propose that an ecosystem facility be located near the community of West Glacier. The proposed "Crown of the Continent Ecosystem Center" has as its goal the improvement of scientific, governmental and public understanding of the relationships between the natural resources that define this ecosystem and the economic processes that determine a balance between use and conservation of its resources. In addition to providing visitor information about public lands in the area, the center would serve as a focal point for research, monitoring and education regarding the Crown of the Continent area.

Potential roles of the Crown of the Continent project includes: a data center and library, interactively linked to related facilities; an ecosystem communication center that



Location of the Crown of the Continent Ecosystem within the Continuum of the Northern Rocky Mountains. Arrows indicate that the Ecosystem boundary (dashed line) is spatially and temporally flexible or "semipermeable" in relation to processes within adjacent areas or systems. Hatched areas indicate federally-designated conservation sites and the cross hatched areas show the location of the Waterton-Glacier International Peace Park and the Bob Marshall/Great Bear-Scapegoat National Wilderness Complex, which are integral components of the Crown of the Continent Ecosystem.

provides linkages among related research institutions in the region; a national and international research-coordinating center that can accommodate visiting scientists; an educational facility that, in cooperation with schools and universities, supports programs which advance ecosystems values on both sides of the U.S.-Canadian border; an interpretive center that houses illustrative exhibits of ecosystem relationships and energy dynamics in the Crown of the Continent area; a conference center that incorporates data presentation facilities for meetings and workshops; a learning center that provides opportunities for personal involvement and cultural

enrichment in experiencing the Crown of the Continent ecosystem; and a center for exploring policy that can enhance human use of the ecosystem without degrading its natural attributes.

The Crown of the Continent project represents one idea of how users and managers of an ecosystem might advance not only preservation of ecological values, but a sustainable economic base as well. The proposed center would be designed to meet the needs of a wide variety of interests. Thus Glacier NP, the Flathead National Forest, and other supporters are stimulating spirited public discussion regarding the proposed center.

If Park Service units such as Glacier are to exert greater future influence on what occurs in other parts of the ecosystem, we must become more active players—and I mean

proactive, not reactive—in forums where management decisions are made or public opinions are shaped. These include chambers of commerce, mayor's offices, and the offices of timber companies and oil companies as well as meetings of wilderness, tourism and other groups considered to be our more natural constituencies.

Park Service staff must not only become more cognizant of what is necessary to preserve the wild or cultural resources within the national park system, but also be more aware of the needs of communities and businesses dependent on such areas. These efforts begin with communication, trust building, and attempting to "walk a mile" in the other's shoes.

Brace Hayden is Glacier National Park's new ecosystem coordinator.

Further Reading

Agee, J.K., and D. R. Johnson (eds) 1988, *Ecosystem Management for Parks and Wilderness*. University of Washington Press, Seattle.

Clark, T.W., and D. Zaunbrecher, 1987, *The Greater Yellowstone Ecosystem; The Ecosystem Concept in Natural Resource Policy and Management*, *Renewable Resources Journal*, Summer 1987.

Williams, R. G., (project leader), *Greater Yellowstone Coordinating Committee, 1987, An Aggregation of National Parks and National Forest Management Plans*, Grand Teton Natural History Association, Moose, WY.

International Joint Commission, 1988, *Impacts of a Proposed Coal Mine in the Flathead River Basin*, Canada.

National Parks and Conservation Association, 1989, *National Parks: From Vignettes To a Global View*, Washington, DC

Sax, J.L., and R. B. Keiter, 1987, *Glacier National Park and Its Neighbors: A Study of Federal Interagency Relations*. *Ecology Law Quarterly*.

Four Steps Toward Ecosystem-wide Objectives

1. Define the goals and measurable targets for ecosystem condition. Goals should be phrased in terms of ecosystem condition (eg. species diversity) and should represent desired conditions for ecosystem components.

2. Define ecosystem boundaries for primary components. Each component, from grizzly bears to giant sequoias, will most likely have a unique ecosystem boundary.

3. Adopt management strategies to achieve component goals. These strategies will frequently transcend political boundaries and thus may require regional, interagency efforts. Recent examples of such efforts include those of the Interagency Grizzly Bear Committee (IGBC) in the Northern Rockies and Cascade Mountains, and those of the Southern Appalachian Biosphere Cooperative.

4. Develop programs to monitor the effectiveness of ecosystem management strategies. Such monitoring programs must begin with a good data base so that changes in ecosystem condition and components can be assessed adequately.

James Agee &
Darryll Johnson (1988)

KEEPING THE COGS AND WHEELS



A dult female gray wolf at relocation site in Glacier NP.
NPS photo by Amy Vanderbilt.

A LOOK AT ECOSYSTEM MANAGEMENT.

In *A Sand County Almanac*, Aldo Leopold declared, "To keep every cog and wheel is the first precaution of intelligent tinkering." The environment in the Northern Continental Divide ecosystem in western Montana and southern British Columbia and Alberta is a system of biotic and abiotic cogs and wheels, one that is extremely diverse and incredibly complex.

To understand this complexity, think of scooping up a handful of soil and litter from an undisturbed forest floor. This innocuous lump contains more order and richness of structure, more history, than probably the entire surfaces of all other lifeless planets. It is a miniature wilderness that would take lifetimes to explore should one make it and its inhabitants the object of serious biological study. Every species living within that clump of earth in your hand is the product of millions of years of history, having evolved under and survived the most severe conditions of competition and catastrophe.

Now, convert this perspective to the Crown of the Continent ecosystem of which Glacier NP is a part. As resource managers, we have the unmitigated gall to presume we can manage such complexity, when in reality we cannot even fathom it. Consequently, "to keep every cog and wheel is the first precaution of intelligent tinkering."

To get some appreciation of the global diversity of organisms, recollect that the most common estimates of the number of species in the world is between 3 and 10 million. More recent data from tropical forests and deep sea investigations place the numbers in the 25 to 30 million species range. In fact, the exact range cannot even be estimated because most species have yet to be identified and described.

Yet all of these species and those already extinct have been the product of evolution—that interplay of environment and genetics over geologic time. In this context, it is important to grasp the meaning of geologic time—say for example, 100 million years. What does that mean? How does a person who lives only 60 to 70 years relate to 100 million? Generation length for humans is about 30 to 40 years. In 100 million years, 3 million human generations would have come and gone.

Evolution works over geologic time. Time plus mutations equal evolution. If a mutation gives an organism a survival advantage—a competitive edge—presumably it will prosper over its relatives and competitors. This ebb and flow over time has resulted in a partitioning of the system into niches wherein each species can survive and propagate itself, based on its interactive relationship with other species as well as the abiotic components of the system—the "balance of nature," so to speak. When one of these species (cog or wheel) is eliminated from the system, then the system adjusts to its

absence, and new relationships are established. All this is accomplished very slowly, allowing the remaining species to respond via mutations and behavioral adaptations.

However, what is happening now is not evolution, but accelerated extinction of species. It has occurred not through competition and mutation but through human intrusion over extremely short periods of time, too short for the system to correct itself. At present, estimates indicate that one species becomes extinct every day. By the end of the 1990s, that rate will be one per hour—approximately one million species will be extinct.

Fueling this process is our own success as competitors. We use intelligence to fabricate technology rather than wait for mutations to increase the competitive advantage. Humans are tinkerers. This, in effect, has allowed man to stack the evolutionary deck for all species, favoring some (such as cattle, horses, sheep, wheat, corn and rice), and weeding out others. Such human-induced changes can radically alter the competitive balance between species.

While one may argue that this process is in fact "modern" evolution, the relationship between humans and other species is not so clinical. Humans depend completely on the other species that occupy this world. In fact, our very existence depends on this diversity of species and the stability it provides. Although conservation of diversity has become key to human survival, we have been slow to adapt this concept.

The Crown of the Continent ecosystem is subject to the same forces that are at work worldwide. The political feasibility of modifying or delaying timber harvest, hydro-power development, fossil fuel extraction, or recreational development to save space for grizzly bears, bald eagles, bighorn sheep, and elk becomes increasingly difficult as the American population, unemployment rates, and the demand for goods and services all increase. Yet the situation demands adoption of a conservation ethic and a method to retain intact systems.

Political considerations aside, it is often difficult to design a program for maintaining diversity because we do not completely understand how natural systems work. Grizzly bears and wolves were not viewed as useful in the 1800s and early 1900s. Leopold advises: "If the biota, in the course of eons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts." In this regard, the wolf as well as the grizzly undoubtedly exerted a strong influence on the evolutionary process of post-glacial species. The current characteristics of elk may have been determined as much by the genetics of wolves as by the genetics of elk. In our tinkering, these are significant cogs that we should not summarily discard.

There is another very practical reason why the diversity of species should be maintained. Species have evolved within a particular range of biological, geological, and climatic vari-

ables and thus are equipped to survive within the normal fluctuation of these factors. When species start disappearing rapidly, it is an indication that some form of instability has been injected into the system. A flawed cable under extreme tension will exhibit accelerated breaking and unravelling of individual strands until the cable itself snaps.

Species can act as an environmental litmus paper. It is significant that the bald eagle, our national symbol, was almost eliminated by the widespread use of DDT, a chlorinated hydrocarbon insecticide. The eagle was our miner's canary on the widespread use of a bioaccumulating toxicant. If for no other than purely selfish reasons we must preserve these cogs and wheels.

Consider the scenario that led to the extinction of the Great Auk, one of the first extinctions recorded in North America. This species was decimated by settlers and fishermen from the 1500s through the early 1800s. Then, in 1830, one of the last remaining colonies was destroyed when the island on which it was located disappeared under the Atlantic. The few surviving birds took refuge on a nearby island. By this time, the birds' plight had become known in Europe, but rather than mounting an effort to save them, collectors offered rewards for specimens of the rarity. In 1844, an Icelandic fisherman was paid 100 crowns (\$60 at today's value) for the last two great auks on earth. Auk habitat is still abundant. There are simply no auks, and there never will be again. This is the finality of extinction.

In the Crown of the Continent ecosystem, there are four species listed as threatened or endangered: the grizzly bear, gray wolf, bald eagle, and peregrine falcon. These species evidently are more susceptible than others to environmental intrusion. Our most sensitive litmus papers have sent signals. It means the system is relatively intact, but we should take heed.

The United States has taken leadership in the effort to preserve biological diversity. It started with national parks. It was advanced further in 1966 with a bill submitted by Senator Karl Mundt of South Dakota, that his colleagues called the "Dicky Bird Bill of 66." This legislation evolved into the Endangered Species Act of 1973, which established national policy to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved..." It is a commitment to replace some of these cogs and wheels, and, perhaps more importantly, to retain the integrity of systems.

One of the cogs and wheels that was discarded earlier this century was the wolf. As a viable member of the Crown of the Continent ecosystem, the wolf has been absent for perhaps 50 years. Ranging throughout North America, it essentially was eliminated by 1930 as the result of a concerted effort to eradicate the species. In the interim, there has been large-scale habitat alteration and human occupancy that has made the vast majority of the historic range simply incompatible with wolves.

But the wolf is returning. Since 1981, wolves have been re-establishing a population on the west side of Glacier National Park. Packs have formed and are reproducing successfully. These small populations are vulnerable, but as they expand they again will start to exert their influence as a predator of large ungulates.

The approach being taken at Glacier NP is, first, to view the wolf as a part of the system; second, to accumulate data to help us understand the wolf and its relationship to the system so that information-based decisions can be made and, third, to develop relationships with other people who have management responsibility within the system.

Wolf movements and population dynamics have been monitored since 1981 when the first wolf was confirmed as a resident. The principal prey species (white-tailed deer, elk, and moose) are being studied to help scientists understand how these ungulates will adjust to the wolves' presence.

Finally, in order to be an active participant in the management of this system, relationships with other administrative units—as defined by the wolf—are being established. To that end formal agreements have been developed for cooperative research and monitoring in conjunction with the U.S. Forest Service and the U.S. Fish and Wildlife Service. Working relationships also are being developed with other agencies that have land or wildlife management responsibilities in Montana and adjacent provinces of British Columbia and Alberta.

Just as systems adjust to the absence of a species, so this system must adjust to one's return. Perhaps this time we shall heed Leopold's advice and take this profound opportunity to achieve a better understanding of these important cogs and wheels. Indeed, if we are to attempt to manage systems we must first start with understanding them. Otherwise, we will simply be making innovative mistakes—allowing different parts to be lost.

Wayne G. Brewster is Glacier NP's wolf coordinator.

EVERGLADES — WHERE DO WE GO FROM HERE?

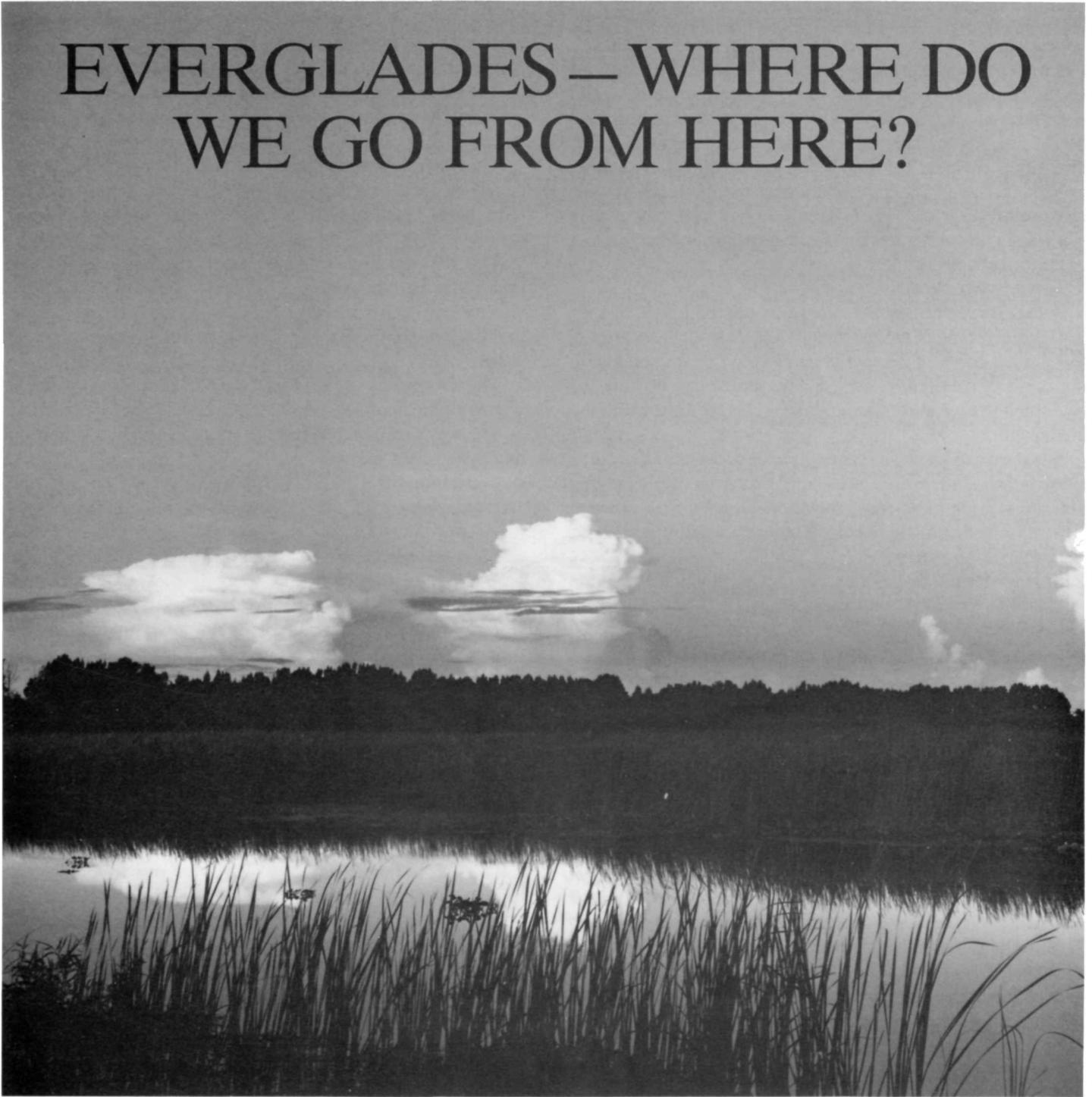


Photo by Lew Wilson.

In a quiet place in our home, a sanctuary from the vicissitudes of life, I have a comfortable chair, a good reading light and three books: The Complete Plays of William Shakespeare, the King James version of the Bible and Marjory Stoneman Douglas' *The Everglades: River of Grass*.

As my subject here is the Everglades, let me quote Marjory's poetry. Lend me your ears.

There are no other Everglades in the world. They are, they have always been, one of the unique regions of the earth, remote, never wholly known. Nothing anywhere else is like them: their vast glittering openness, wider than the enormous visible round of the horizon, the racing free saltiness and sweetness of their massive winds, under the dazzling blue heights of space. They are unique also in simplicity, the diversity, the related harmony of the forms of life they enclose.

The miracle of the light pours over the green and brown expanse of sawgrass and of water—shining and slow moving below the grass and water that is the meaning and central fact of the Everglades of Florida.

It is a river of grass.

Where do you begin? Because when you think of it, history, the recorded time of the earth and man, is in itself something like a river. To try to present it whole is to find oneself lost in the sense of continuing change. The source can be only the beginning in time and space and the end is the future and the unknown.

What we can know lies somewhere in between. The course along which—for a little way—one proceeds, the changing life, the varying light, must somehow be fixed in a moment clearly, from which one may look before and after and try to comprehend wholeness.

So it is with the Everglades, which have that quality of long existence in their own nature.

They were changeless. They are changed.

Marjory Stoneman Douglas: who writes like that? Marjory recognized the complexity of the system and yet, in hindsight, it was far less complex—even simplistic—in 1947 compared to the Everglades system as it exists today.

It would easily take your collective lifetimes and those of your graduate students and hundreds of millions of dollars for us to truly comprehend all the ramifications of man's past actions and all the alternatives available to us.

We will never have all of the above—our nation's budget will not allow the expenditure of unlimited funds. And even if sufficient funds were available and people, qualified scientists, were available, time isn't available! But...there are levels of understanding on which to take specific action.

The Florida congressional delegation—with the full support of the governor and cabinet—is pressing for enactment of the Everglades National Park expansion plan.

The State's SWIM process is forcing the issue of water quality to a conclusion.

The United States lawsuit requires the District and the Department of Environmental Regulation to examine their roles and their conscience. No longer can we accept degraded water, not from sewage treatment plants, not from industrial plants, not from agriculture. The water quality issues will be solved.

The continuing Everglades paradox for the administrators, scientists and amateur Everglades "buffs" is: how to enhance and protect the whole when so much of our effort is focussed on the pieces.

It is a sad truth—but one that's worth acknowledging—that even winning all the "brush fires," tackling all the individual problems, won't necessarily protect the Everglades: the whole is indeed more than just the sum of the parts.

You have focussed your discussion on water—water—as a catalyst, not a commodity, water as the driving force of this system.

The technical recognition of the importance of water begets an earthshaking political recognition, namely that the Everglades, along with the traditional agricultural and urban components, is a legitimate user of water.

That concept leads to the near heretical statement of fact: that future urban water needs will have to be met from alternatives such as reverse osmosis. Agriculture had better practice water conservation and learn to live with far less water.

The Everglades—and I mean the park—and the upstream system will win additional water "rights" by executive action, by congressional action or by the court of law. Fair sharing is the name of the new era.

You have laid a foundation here this week and it is an extraordinarily good one. I think three pillars must now be raised.

First, we need a goal that everyone recognizes and most accept. I'll be blunt: I don't think species goals are good enough. Those goals are useful barometers but I am convinced that the key is habitat based on water and maintaining the appropriate processes to protect that habitat.

I say this with a tinge of frustration.

When, with Secretary Morton's and the Florida congressional delegations' and the congressional appropriations committees' stout support, I established the park's research center, fighting off OMB and the other park superintendents and regional directors who all wanted a "cut in the action," I, frequently frustrated by the scene of an ecosystem literally dying, would shout at the Everglades staff, "Tell me what to ask for. What must you have?" And that, my friends, is still the key question sixteen years later. Where is it that we are going?

Do you remember the scene in Lewis Carroll's masterpiece, *Alice in Wonderland*? Alice, perpetually lost, stopped at a crossroad where she spotted the Cheshire Cat stretched out on the branch of a nearby tree. "Cheshire Cat," asked Alice, "would you please tell me which way I ought to go from here?" The wise cat responded, "That depends a good deal on where you want to get to." Alice: "But I don't know where I am going." The cat responded, falling off to sleep, "Then it doesn't matter which way you go."

Ladies and gentlemen, Everglades experts all: which way do you want us, the administrators and the American people, to go? Give us a battle plan.

Second, we need to reinforce the commitment of the scientists, managers, even famously non-committal politicians to continue and yes, increase the expensive, time consuming research and management efforts needed to achieve specific goals. Research is the vital element of the next ten years as the

attempt to rehabilitate the Everglades becomes a reality.

Third, we need to be imaginative and even bold; we need to take risks in achieving those goals before time literally runs out.

I look back on a visit to the park in 1974. It had been a good rainfall year. The park was full of "prey." John Ogden, Jim Kushland and Jim Tilmant encouraged me to close the Tamiami gates and manipulate a "dry down." The director of the National Park Service went wild when I broke the news to him that I wanted to try to recreate nature.

Counsel to the Park Service had a heart attack. After all the years fighting for more water...to guarantee the park a minimal water supply, now, after all that pain and suffering, I wanted to close the gates to the park.

The corps laughed. The Secretary of the Army giggled with glee. Nervously, I explained it was an "experiment," rolling the talented and committed park hydrologist.

Joy of joys, four months later, my son and I airboated into Lane Rookery which produced thousands, yes, thousands, of young, healthy wood storks.

Why didn't we do it again? The official response is that those water conditions could not be duplicated. The real reason is that John and Jim left—the dash and dare that marked their careers went with them.

Administrators, fearful of precedent, allowed the park to be buried in excess water.

We did learn that timing of delivery is as important as supply. They go hand in glove.

You must act—you must be innovative—you must try. You must urge reluctant administrators to try new management tactics. You must be "active"—no longer reactive.

As I reach an age where time is becoming all important and my well known high level of frustration with ineptitude, foolishness and greed is at a zenith, I look back over my Everglades years, battles fought, won and lost, with few regrets.

What better fight than that of the Everglades?

What indeed does man stand for—live for—than to fight for what is right? No man or men have any "right" to destroy a national park nor the system that supports a national park.

The Congress had mandated in the Redwood Act a manifesto: "The authorization of activities and the protection, management and administration of their areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established."

I have never been more confident that President Bush, the Justice Department and the Department of Interior mean to make meaningful progress to solve the multitude of Everglades problems.

We must tell the story, the Everglades story, in terms the American people, young and old, can understand. They will save the park.

There are tough choices ahead. Money must be spent—but above all, you and I, we must not give up.

Very, very late in Sir Winston Churchill's life, he has invited back to his boyhood school to accept honors and accolades. Churchill had hated that school. Sent so very young, dull with books, born with a lisp, awkward at sports, frequently teased and punished, he had survived. His long life was marked with tenacity but he bore real childhood scars.

He rose to respond to the Headmaster's eloquent citation. He stumbled to the podium. He stared down at the rows of young men. His voice barely audible, rose, "Never give up," and he returned to his seat. He paused, turned and spoke, "never, never give up."

I count on you to never give up.

Nathaniel P. Reed was Assistant Secretary for Fish and Wildlife and Parks under the Nixon and Ford Administrations. The previous article was taken from his October 26 address delivered at the Everglades Symposium: Spacial and Temporal Patterns as Guidelines for Restoration.

A NEW VISION FOR GREATER YELLOWSTONE

The Greater Yellowstone Ecosystem is an international treasure. According to scientists, Greater Yellowstone is one of the largest, essentially intact ecosystems remaining in the temperate zones of the earth. It encompasses roughly 14 million acres, including two national parks—Yellowstone and Grand Teton—seven national forests, three national wildlife refuges, BLM lands, state lands in Wyoming, Montana and Idaho, and more than a million acres in private ownership.

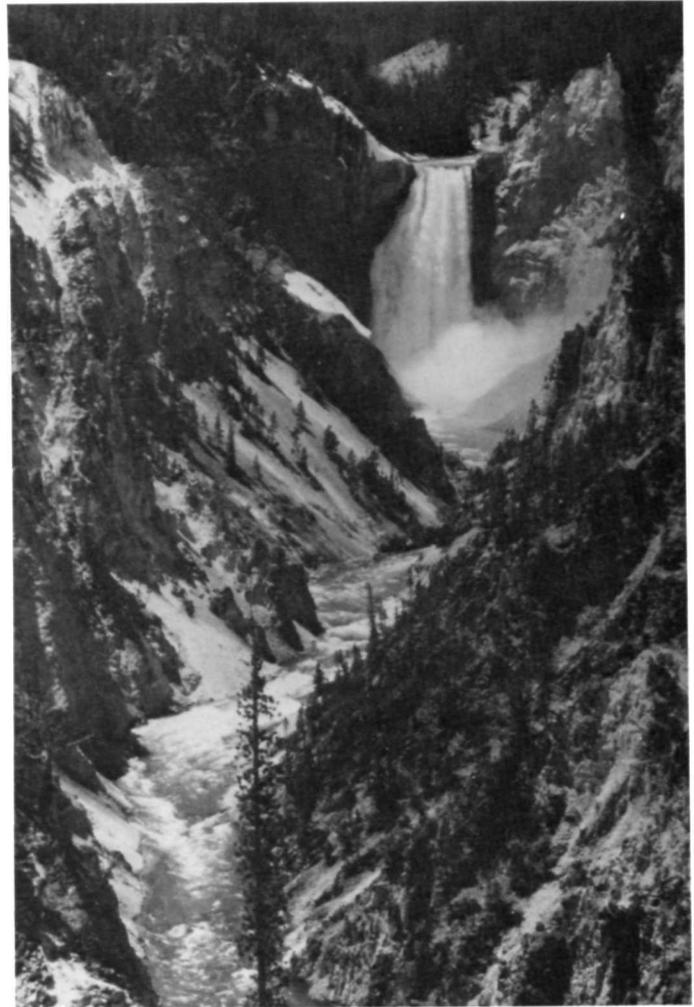
Greater Yellowstone is a land of superlatives. At its heart is Yellowstone National Park, the genesis of the national park movement world-wide. In recognition of its international significance, the United Nations has designated Yellowstone a Biosphere Reserve and a World Heritage Site.

Here too, you will find the first national forest—Shoshone—and more than four million acres of designated wilderness within Greater Yellowstone's national forest lands. Add in another 2½ million acres managed as de facto wilderness by the Park Service, and you have one of the largest aggregations of wildlands left.

Greater Yellowstone harbors the largest elk herds in the world; some of the greatest concentrations of moose, bighorn sheep, and pronghorn antelope in the nation; and one of our last free-roaming bison herds. It is one of only two places in the lower 48 where the grizzly still roams. You will find whooping cranes, bald eagles, trumpeter swans, peregrine falcons, Yellowstone cutthroat trout, and other rare, threatened and endangered species. Indeed, if the suggested reintroduction of the wolf occurs, Yellowstone would have an essentially complete fauna.

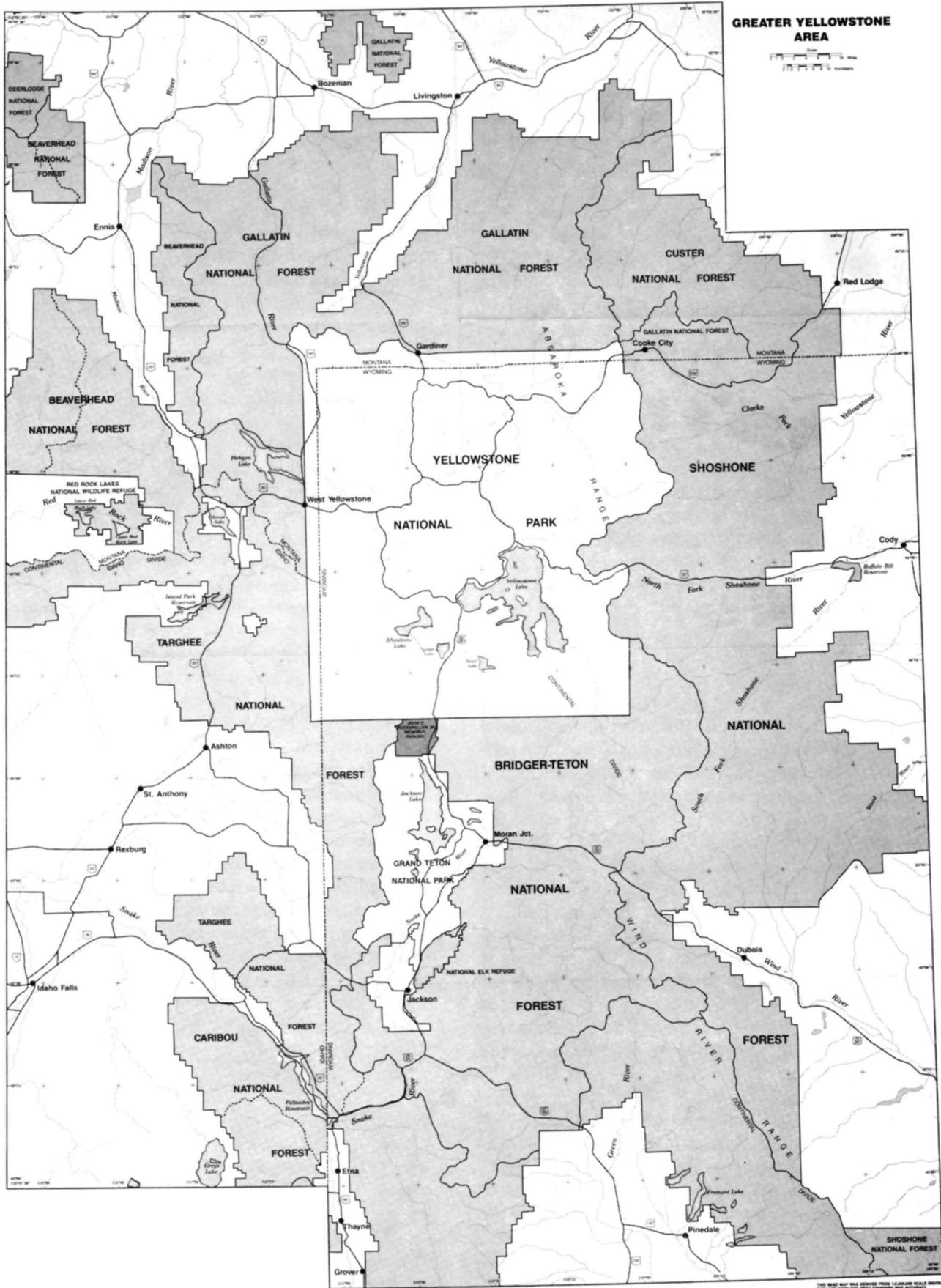
Yellowstone was first set aside because of its unusual thermal features. Greater Yellowstone encompasses the largest and last undisturbed geothermal region in the world—more than 200 geysers, more than 10,000 thermal features. Greater Yellowstone's high country forms the pristine headwaters of three of our major river systems—the Snake-Columbia, the Green-Colorado, and the Yellowstone-Missouri. Without a doubt, the region boasts some of the best trout fishing in the world. In short, Greater Yellowstone is a very special place, meriting special treatment and protection.

But Greater Yellowstone also has served as the premier battleground for many of our most significant public land issues. Here, we face an environmentally destructive Forest Service timber and roads program, which annually generates



millions of dollars of losses for the U.S. Treasury. Here too, the legality and wisdom of the vast oil and gas program on public lands have been brought into question. Yellowstone is naturally the focal point for efforts to protect the remaining geothermal features. And, Greater Yellowstone is the principal area for many endangered species issues—can we save the dwindling grizzly bear population? Can we bring back the wolf to some of its historic range? What happens on these issues in Greater Yellowstone has ramifications far beyond the boundaries of this wildland ecosystem.

Since Yellowstone was our first national park, it has always served as a model for wildlife, wildland and national park conservation efforts. Today, Yellowstone is again a model, this time for a new approach to wildland conservation, the ecosystem approach.



The Greater Yellowstone Coalition (GYC) was formed in 1983 by people concerned about the fragmented management of the Greater Yellowstone ecosystem, and the accelerating degradation of its lands and resources. Six years later, Greater Yellowstone is still under assault. Its forests are being clearcut and crisscrossed by roads, affecting wildlife and habitat, plant communities, watersheds and Yellowstone's blue-ribbon fisheries. Drilling on lands surrounding Yellowstone National Park could permanently degrade or destroy some of the park's world-famous geysers, hot springs and other geothermal wonders. Proposed hydroelectric dams threaten fishing, recreational opportunities, scenic values, and riparian habitats critical to many wildlife species. Millions of acres of Greater Yellowstone's national forests have already been leased for oil and gas exploration. Burgeoning development around the ecosystem is systematically destroying wildlife winter range, calving areas, migration corridors and other critical habitat components.

The cumulative impact of all that is happening could degrade the Yellowstone ecosystem to a point from which it might not recover. Compounding the situation is the fragmented management of the ecosystem's lands and resources. In Greater Yellowstone, there are a multitude of agencies—the Park Service, Forest Service, Fish and Wildlife Service, Bureau of Land Management, three state fish and game departments, and more—managing under inconsistent and even conflicting mandates. Each manager pursues his plan for his particular piece of this complex management jigsaw puzzle. As a consequence, the ecosystem is being whittled away.

The Coalition's programs on behalf of Greater Yellowstone fall into two major categories. First, we review, critique and monitor the endless development proposals around the ecosystem. Some we have been able to halt; some we have helped modify to reduce their impacts. Many, unfortunately, have gone forward as proposed. We do believe that what the ecosystem can bear is limited, and, therefore, that development proposals must be reviewed in the context of the overall carrying capacity of the ecosystem. Unfortunately, this approach has not been adopted by the agencies involved.

Secondly, the Coalition has been developing its own alternative vision and plan for the ecosystem. We know that if current trends continue, if current management plans are fully implemented, then the prognosis for this ecosystem is not bright. Thus, through a project known as Greater Yellowstone Tomorrow, GYC will be plotting out a new course for the ecosystem's future.

What is the Coalition's vision for Greater Yellowstone? How should the area be managed by the public agencies? Yellowstone National Park Superintendent Robert Barbee expressed it at a symposium in Laramie, Wyoming, last April:

Considering the area's extraordinary values and the public's well-established perception that the area is somehow all "Yellowstone," it appears that greater Yellowstone can be managed best not by trying to do many things satisfactorily, but by concentrating on doing one thing very

well. That one thing is protecting the integrity of the natural systems that are the area's most important resource. This does not mean that other uses must be totally excluded. It does mean that one overriding purpose—maintaining the integrity of the greater Yellowstone area—must be given primacy in management decisions.

We wholeheartedly agree.

The Greater Yellowstone Coordinating Committee (GYCC), comprised of the ecosystem's Park Service and Forest Service managers, is now working on a "vision document" to provide an overall management framework for Greater Yellowstone's lands and resources. The GYC recently submitted its recommendations to the GYCC. We have stated that the management goals for Greater Yellowstone must include the following:

1. Ensuring the long-term ecological viability of the ecosystem;
2. Maintaining and restoring the full complement of ecosystem biological diversity and natural processes;
3. Maintaining and, where necessary, restoring and improving the natural hydrologic features of the ecosystem, such as the quality and quantity of water production, healthy streams and lakes, and fully intact watersheds, and their associated flora and fauna such as the blue-ribbon fisheries;
4. Ensuring the long-term protection of the region's world-renowned geothermal features;
5. Protecting and, where necessary, enhancing the visual quality of the ecosystem's scenic vistas and aesthetic quality;
6. Maintaining the Class One airshed quality for the national parks and wilderness areas within the ecosystem; and
7. Ensuring that all federal management activities are ecosystem-sensitive, environmentally sound and well coordinated.

The Greater Yellowstone Coalition, the Park Service, and the other Greater Yellowstone management agencies must work together to ensure that the Greater Yellowstone ecosystem endures forever, in all its richness and variety. To do this, we must adopt a new set of standards and guidelines to protect Greater Yellowstone's land and resources. Then, once again, Yellowstone will stand as the premier symbol of what we can achieve in the realm of wildland protection and conservation.

Ed Lewis is the executive director of the Greater Yellowstone Coalition. More information about GYC may be obtained by writing P.O. Box 1874, Bozeman, MT 59715.



HAPPY 90TH, MR. WIRTH

How many people can claim they have been given ninety years within which to accomplish their life's work? How many have even taken more than a few moments to sit down and think intensely about the kind of legacy they want to leave to future generations and about how that desire may influence what they choose to do with the remainder of their lives? Perhaps Park Service employees are prone to explore this kind of thing more than those in other professions. However, few of us are in a position to test our beliefs and our commitment in the way we lead an agency, or to shape the way large numbers of people think about the environment, or to have one brilliant idea so basically, simply elegant that it affects the accomplishments of an entire generation of men and women in the workforce. This, indeed, is influence, and the man who wielded it was and is Conrad L. Wirth. In this, the month of his 90th birthday, the *Courier* wants to take the opportunity to salute his fine professionalism and to commemorate the contributions he has made during a lifetime of dedication to the mission of the National Park Service. What follows are birthday greetings from friends far and near who had the privilege to work closely with him during an important time of change and renewal in the history of the Service.

Happy Birthday! At ninety years of age you are still absolutely indefatigable! To see you this fall in the Adirondacks for the board meeting of the American Conservation Association was a joy, and you are such a splendid example to the rest of us.

Your caring for the natural beauty of this country, with your wonderful Helen by your side, has been a national treasure. In all the years since we first met (was it back through our mutual

interest for the environment, how many decades ago?!), I've thought of you as one of the giants in the work of the National Park Service, and in the creation and preservation of our parklands. You have had a large hand in the blossoming of interest and appreciation of our system of parks and wilderness areas—an architect of so much good and happiness-giving in our increasingly crowded world today.

With admiration and fondest birthday wishes,

Lady Bird Johnson

Ninety years is a long time to live, and I can only say that our country is fortunate that you have been with us all that time. Your contributions have been monumental, as those who have worked with you know—and those who haven't should have a way of finding out. I suspect that celebrating "Connie Wirth Month" in December will provide a good start.

Your planning and launching of Mission 66 is, alone, worthy of a statue in the lobby of the Interior building; its importance was second only to the founding of the National Park Service. In a large measure, you gave the Service a new lease on life after some very trying and difficult years, and you shepherded it through its greatest—and often most difficult—times. You can stand shoulder to shoulder next to our late mutual friend and mentor, Horace Albright. Without the two of you, the Park Service would have lived a different and certainly less brilliant life.

And without the two of you to work with, I am sure I would never have had so rewarding a life in conservation. For which, Connie, I will be forever grateful to you!

There is nothing that says you must stop at ninety. So stay with us. We need you.

In the meantime, our heartiest congratulations on your ninetieth. Mary and I send our love to you and Helen.

Laurance S. Rockefeller

Congratulations upon your 90th birthday. When more than fifty years ago I came to the National Park Service in Washington to help in starting the history program, there you were—engaged similarly in setting up the branch of park planning of the state park activities.

I came to admire your dedication and great skill at your work then, and then later when you became a *Merit Director* of the Service. I followed with approval the policies and programs you brought about.

After Mather, Albright, Cammerer and Demaray, you became for me and many others "Mr. Park Service," and you have been that down through the years till now.

Mrs. Celia Chatelain, my wife, and I wish for you and Helen the best of everything.

Verne Chatelain



Conrad Wirth and assistants with district and state Emergency Conservation Work Supervisors (March 1935.)

Ellie and I wish you a wonderful 90th birthday. It is hard to believe you are 90 and that we have had the privilege of knowing you for more than 40 years. I should add, 40 great years with many enjoyable times and lots of fun at "Try and Rest" and Deep Well Ranch. We have watched your wonderful family grow up, all happily married, and we know your fine young grandchildren. Our only regret is that we live so far apart we can't see you and Helen more often.

Don't know if you remember or not, but Isabel Haynes was 90 on October 25th. She is doing fine and still lives alone. Her only problem is arthritis in her knees which makes it difficult for her to walk much.

Time certainly does fly too fast, as you know, Connie, but hope we will have a chance to see you and Helen before too many moons. Ellie joins me in sending our love to you both and we wish you many more years of health and happiness.

Trev Povah
Hamilton Stores

I am delighted to be among your countless hosts of admiring friends to congratulate you on the occasion of your 90th birthday on December 1. I hope that there will be many more December 1's in your highly productive life.

You and I have known each other since 1941, when I first went to Washington, and I have been your fan ever since. Your friendship is one I shall treasure as long as I live, for the admiration I hold for you is boundless.

Your contribution to the conservation of America's natural resources is legendary. You succeeded into the directorship of the National Park Service at a time when it particularly needed the type of management style that was so distinctively yours. It was one of great vision and inspiration, for you achieved no end of good for the national park system. You engendered a great "can do" spirit throughout the Service

during your directorship, and I am proud and happy to have been a part of it.

Knowing and collaborating with you on projects of mutual interest over the last many years, both within and outside of the National Park Service, has been stimulating and most uplifting for me, and I shall always be grateful for this opportunity.

Bette and I send our love to you and Helen and our warmest good wishes for many more happy and fruitful years.

Nash Castro
Palisades Interstate
Park Commission

On behalf of the employees and alumni of the National Park Service, I send you and your wife, Helen, greetings and best wishes as you celebrate your 90th birthday. We honor you because you gave so much of yourself and made so many contributions to the National Park Service. Let me briefly mention a couple of your key accomplishments that have had far reaching results.

While you were Director of the National Park Service, you launched Mission 66. This 10-year program that you began in 1956 and saw to completion in the Service's golden anniversary year of 1966 rejuvenated a sadly neglected national park system. Mission 66 has been called the system's renaissance. This program also earned you the title of "magnificent bureaucrat," because of your personal involvement and dedication, which not only revitalized the parks but also encouraged a national conservation movement among private citizens and other government agencies.

Your liaison efforts brought the National Park Service and the Civilian Conservation Corps together to accomplish much needed repair in the parks. This partnership that you nurtured sets a fine example for one of our current key initiatives—the encouragement of partnerships to accomplish NPS goals. You also made it happen during those tough years when improving national parks and protecting natural resources were just becoming crucial issues. Later, as Interior's representative on the CCC Advisory Council, you became a driving force in this movement.

Even in retirement, your devotion to the parks continues. You have worked with many private conservation organizations, served on the board of the National Geographic Society, and received honors that have included the Rockefeller Public Service Award and the American Forestry Association's Conservation Award. Your book titled "Parks, Politics and the People," which offers a personal and touching account of your long involvement with park administration, also provides an educational guide to the work of public servants in the conservation field.

I have only briefly mentioned key areas of your outstanding career. You are certainly, as some have described you, one of the "venerable oaks of the NPS." Without your guiding hand, the parks would be much different today. You have made a



Mr. Wirth (center) poses with other members of the joint U.S./Mexican commission which explored the possibility of making Big Bend an international park. (February 1936.)



Mr. Wirth shakes hands with President Lyndon B. Johnson following the 1964 signing of the Land and Water Conservation Bill and the Wilderness Act. Photo by Abbie Rowe

lasting contribution and left an indelible mark. Those of us now working for the National Park Service thank you for that.

Let me close by once again wishing you a happy 90th birthday, and congratulating you on a lifetime of environmental leadership and service.

James M. Ridenour
NPS Director

Your achievements for the National Park Service are legend. You served longer than any other director of the National Park Service. You played a key role in administering the Civilian Conservation Corps, turning it from an initial burden to a benefit for the National Park Service that is still paying dividends today. Your close association with Presidents Roosevelt, Kennedy and Johnson gave the National Park Service recognition and influence beyond its size. Your role in the Mission 66 program also continues to pay dividends.

Most people remember you for those things, but on your 90th birthday, we would like to remember you for something else that is important. Under your administration, the Employees and Alumni Association was founded. The E&AA has done so much for the esprit de corps of the National Park Service, and has helped countless employees and their families. On behalf of this great organization, we would like to extend to you a big thank you for this often overlooked contribution to the Service.

Lorraine Mintzmyer
Chair, E&AA
John Reynolds
Vice Chair, E&AA

My spies in the Washington area have informed me that you have a very special birthday approaching. As they also spilled the beans as to which milestone it will be, I cannot

dust off and re-use the old gag the small boy pulled on the teacher, when handing her a highly polished apple. The words were something like “we don’t know how old you are, teacher, but you sure don’t look it.”

As I have now spent almost twenty years in retirement in a state that was first explored and claimed by Spain, it occurs to me that something left by them might apply also to you. So, since you have worn with good grace the honorary title of an Indian chief; I hereby declare you also to be an honorary Spanish explorer.

On the walls of stone at El Morro there is inscribed, after the name of one of the first exploration party, these words, “Paso Por Aqui” – in English, “He passed this Way.”

On December 1, and thereafter, I shall think of you as Senor Conrad L. Wirth, El Servicio Nacional De Parques – “Paso Por Aqui.”

Vera joins me in wishing you a very happy birthday.

Bill Carnes

As one of your countless friends and admirers it is a pleasure to join in wishing you a happy birthday.

This nation will remain always in your debt for the matchless leadership you provided in coordinating the Interior Department’s emergency conservation activities employing Civilian Conservation Corps resources in the nineteen thirties, and for the wisdom and foresight demonstrated in your conception, organization and direction of Mission 66 to refurbish the national park system after the neglect it suffered due largely to the exigencies of World War II. These were your outstanding accomplishments during thirty-one years in the National Park Service, including your thirteen years as the sixth director – the longest period served by any chief of the Service.

Connie, although I was well beyond my early formative years when we became acquainted fifty-three years ago, my

experience under your inspiring direction in the National Park Service, and subsequently during our association in the production of your book, Parks, Politics, and the People, and in other projects undertaken following your retirement, nevertheless served to broaden my outlook and gave new dimensions to my life. I wish all the best for you and Helen on your special birthday, and in the whole of the future beyond that noteworthy event.

James F. Kieley

I wish I had the ability and wit to tell you how much knowing you and working with you has meant to me, and that includes Helen too. You are a World Class team!

Having roots that extend to Minnesota, as do yours, I believe our relationship has had a special quality, beginning even before I had the good fortune to serve with you in the National Park Service beginning in 1955. In 1935-37 I served as a wildlife management supervisor in the state forests of Minnesota under the CCC Program. I first noted your footprints in Itasca State Park while you were supervising the CCC activities for NPS in the state parks. You had such a long stride I did not catch up with you until the Fish & Wildlife Service (FWS) transferred me to Washington, DC, in 1952. That is when I first met you face to face. Good fortune followed. Vic Cahalane retired, and you and Ronnie Lee wondered out loud in my earshot why I did not apply for that job in NPS. I did, and it was one of the best things I ever did.

I'll never forget an incident that occurred soon after my transfer from FWS to NPS. You called a meeting with John Farley, then director of the Fish & Wildlife Service, and some of his staff to announce my transfer. The purpose of the meeting was to encourage close cooperation in wildlife research and management between the two agencies. In your opening remarks, you referred to me as "the cream of the crop" of biologists in FWS. That was too much for John Farley. He immediately spoke up, admitting that I was pretty good, but added, with appropriate emphasis, that "the Fish and Wildlife Service was not out of the dairy business because Fredine transferred to NPS!" That put me in proper perspec-

tive, but your faith in me was a great support throughout my National Park Service career.

So, I thank you for that faith. Your leadership, confidence in your staff, and the example of your own selfless career are all elements in making you revered as one of the great directors of the National Park Service. And you are a shrewd poker player, too. Your victims will never forget that either.

Best wishes for a memorable birthday and for all the rest to come.

Gordon Fredine

Happy 90th birthday! How nice it would be if my father, George Melendez Wright, could be here to celebrate the "great day" with you.

Sherry Wright Bricetto

Family Update: Helen and Connie Wirth have two sons, Ted and Pete. Ted worked nine years for the National Park Service, first in the Midwest Regional Office, then in Grand Teton and Yellowstone, before leaving to start his own consulting firm in Billings, MT, where he still resides. He and his wife, Gloria, have been together 35 years. They have two children, T. Jay and Cherie, and five grandchildren. Pete Wirth and his wife, Chris, live at West Acres in New Lebanon, New York. They have made a separate home for Connie and Helen on their West Acres grounds.

Though Connie Wirth celebrated his 90th birthday on December 1, please remember that this is his birthday *month*. Those who haven't already gotten in touch with him and his wife should address their greetings to him at P.O. Box 480, West Acres, New Lebanon, NY 12125.

In order to help make his birthday month special, E&AA also is offering an autographed hard-cover edition of Connie's Parks, Politics and The People to the first 25 people who remit \$100 by either joining E&AA as full Life Members or by upgrading their annual membership to full Life by remitting \$100. The book is an eyewitness account of an exciting period in the growth and development of the national park system.

PARK BRIEFS



Ranger Susan Kossler discusses National D.A.R.E. Day.

Designated by Congress as National DARE Day (Drug Abuse Resistance Education), September 14 heralded activities at **Grand Canyon NP** to teach children the skills to say "no" to drugs and alcohol. For National DARE Day, Grand Canyon School and the National Park Service jointly hosted an outdoor assembly for kindergarten through eighth grades. Loren Detwiler, the elementary school principal, and John Reed, assistant superintendent of Grand Canyon NP, spoke briefly about the program, as did other invited guests.

At 10:30 am, in conjunction with nationwide celebrations, Detwiler rang an old-fashioned school bell symbolizing the ringing in of a new school year and the sixth year of the DARE program. Ranger Beth Betts received a special recognition award for her outstanding work as a DARE officer at Grand Canyon School and as a member of the Arizona Regional Training Staff. She leaves Grand Canyon to join her husband at Rocky Mountain NP. Ranger Susan Kossler replaces her at the school.

A recent visit to **Mount Rushmore NMem** provided a lesson in archeology for Ian Kenning of Ottumwa, IA, and Neremy Geerdes of Grand Rapids, MI. While attempting to dig a playhouse for Ian's little sister, they loosened a slab of rock and unearthed three small plaster busts dating back to the construction of the memorial.

Approximately four inches wide and six inches tall, the busts depicted George Washington. Sculptor John Gutzon Borglum created

smaller models of each of the presidents he carved on the rock face to raise funds for the project or to be given as gifts to keep interest high during construction.

"The broken pieces and flaws in the discovered models lead us to believe the boys uncovered a dump site," stated Chief of Interpretation Jim Popovich.

"We are excited about the find," continued Superintendent Dan Wenk. "It reinforces the fact that any ground disturbance can result in a 50-year-old discovery."

On May 30, 1939, Spanish explorer Hernando de Soto and 600 men sailed into Tampa Bay, FL, and began a four-year odyssey of exploration through portions of ten southeastern states. By the time the mission was completed more than 300 soldiers and de Soto had died. Because the expedition did not find the anticipated gold and silver, the Spanish crown judged the attempt a failure and wrote the attempt off as a loss. However, the de Soto exploration was the first European effort to successfully penetrate and search the vast interior of what was to become the southeastern United States.

Even though de Soto and his men spent four years and walked thousands of miles, significant evidence of their presence eluded discovery for almost 450 years. Then, in the early spring of 1987, during routine shovel-testing in an area to be cleared for office development in downtown Tallahassee, B. Calvin Jones, a Florida Department of State archeologist renown for his keen sense of place, was looking for the 17th-century Spanish mission, La Purificacion de Tama, and suspected that evidence of the mission might be found at this site. Instead, and much to the surprise of everyone, he found an archeological resource of major significance in American history. Jones found the 1539 winter encampment of Hernando de Soto.

The significance of the discovery was apparent to everyone. Land developers postponed their construction activities for six months while a full-scale archeological excavation took place. The de Soto-Apalachee site is the only direct archeological evidence of the 1539-43 Hernando de Soto expedition in North America. The discovery has

provided an unparalleled opportunity to glimpse the products and processes of one of the most significant historical events in American history. Although other sites pertaining to the de Soto expedition probably still exist elsewhere along his ephemerally located expedition route, they have not been and may never be found again.

A part of the NPS plan to commemorate the 500th anniversary of Columbus' voyages to the Americas includes publications concerning the cultural, social, and economic exchanges between Europe and the Americas that followed. In order to provide the public with information on the 1539-43 Hernando de Soto expedition and the de Soto-Apalachee site, the Southeast Region's **Interagency Archeological Services Division** and the Department of State's **Bureau of Archeological Research** agreed to prepare a pamphlet covering: 1) the exploration of the southeastern United States, 2) the de Soto-Apalachee site that touched on contact between native Americans and Europeans, and 3) the ramifications of that European contact and New World expansion on Native American society.

The brochure has been completed and distributed to selected southeast regional parks as well as interpretive exhibits along the official "de Soto Trail" in Florida. Copies are available from the Interagency Archeological Services Division, Southeast Region.

John E. Ehrenhard

NEWS



Arthur L. Stewart has been appointed the new deputy superintendent of Gateway NRA. He comes to the position from that of NPS Interagency Resource Division deputy chief. Stewart also has served as chief of the Natural Landmarks Program and the Division of State Heritage Programs.

Curecanti Superintendent **Joseph F. Alston** has replaced Ben Clary as assistant superintendent for Yellowstone NP. Alston began his NPS career as a seasonal fire fighter in 1970 at Grand Canyon NP, then moved on to Dinosaur NM, Yellowstone NP, and Curecanti NRA, before being offered the assistant superintendency of Yellowstone, following Ben Clary's move to the superintendency of Voyageurs NP.

George Washington Birthplace NM Superintendent **George Church** has been named assistant superintendent of Fredericksburg and Spotsylvania County Battlefields Memorial NMP. In making the selection, Mid-Atlantic RD Jim Coleman cited Church's experience and leadership in preservation and land use issues.

Rocky Mountain Regional Office Chief Ranger **John F. Chapman** has been named to the superintendency of Curecanti NRA. He replaces Joe Alston.

"I'm pleased to be returning to a field assignment because I enjoy working in the parks," said Chapman, a 6-foot-4-inch, 182-pounder who counts such strenuous activities as running, swimming, backpacking, technical mountaineering and river-running as hobbies. He also enjoys fishing and photography. Will he fish Curecanti's three lakes that stretch over 40 miles? "I'd be foolish to go there and not fish," he noted.

William C. Walters, Indiana's director of the Division of State Parks, has been named NPS assistant director for national recreation programs. Walters will be administering NPS programs for planning, protecting and developing the nation's outdoor recreation resources. This includes conservation of wild and scenic rivers and trails.

Richmond NBP Superintendent **Dwight C. Storke, Jr.**, has been named to the superintendency of George Washington Birthplace NM. He is returning to the park where he began his NPS career and where he spent 17 years prior to his assignment to Richmond NBP.

Gerald D. Patten has been named director of the North Atlantic Region, headquartered in Boston. Much of Patten's 24-year career with the Service has been devoted to management, design, planning and environmental compliance programs. He succeeds Herb Cables, now NPS deputy director. Former Deputy Director **Denis P. Galvin** fills in behind Patten as Associate Director, Planning and Development. Outside of his NPS responsibilities, Patten has assumed the presidency of the American Society of Landscape Architects.

Fred Boyles, an NPS historian, has been appointed the new superintendent of Andersonville NHS. Most recently the superintendent of Moores Creek NB, Boyles also has served at Cumberland Gap NHP and the Southeast Region.

David Moffitt has been chosen to fill the headquarters position of Assistant Director, Visitor Services, where he will provide direction for a wide range of activities that constitute the central core of day-to-day operations in the parks. A 27-year veteran of the Service, Moffitt was most recently superintendent of Colonial NHP.

Mid-Atlantic Deputy Regional Director **Alec Gould** has been appointed superintendent of Colonial NHP, the park where he began his NPS career as a ranger/historian in 1962. Since then he has served at Fort Donelson NMP, Appomattox Court House NHP, Lyndon B. Johnson NHP, and Buffalo NR.

"Alec Gould's experience within the regional office and as a superintendent at three parks will serve Colonial well," said Mid-Atlantic RD Jim Coleman.

Theodore Roosevelt NP **Charles (Mack) Shaver** has been appointed superintendent of Channel Islands NP, where he replaces Bill Ehorn, now Redwood NP superintendent.

"Mack saw the early beginnings of land acquisition and construction of the visitor center for Channel Islands NP when he served as its chief ranger in 1978," said Western RD Stan Albright. "He will continue the fine tradition of management and continuity that has been the hallmark of this natural area."

Fredericksburg & Spotsylvania County Battlefields Memorial NMP said goodbye to **Sandy Rives** recently. Rives, the park's management assistant, has moved into the same position at Shenandoah NP. While at Fredericksburg, Rives was instrumental in preparing the legislative support package leading to the introduction of HR 875, calling for expansion of the park boundary. He also worked closely with the team that developed the park's general management plan.



Landscape architect **Steve Elkinton** has transferred from the Denver Service Center's Falls Church office to the WASO Recreation Resources Assistance Division where he now fills the newly created position of Long Distance Trails Manager. With trails planning and construction experience at Cuyahoga Valley NRA and National Capital Region—as well as inspiring memories of hiking on the Appalachian and Pacific Crest Trails—Steve looks forward to working with park and regional offices interested in protecting long-distance trail corridors.

Thomas J. Ferranti, Isle Royale NP administrative officer, has been promoted to a similar position at Glen Canyon NRA. Ferranti's professional experience includes work as a seasonal ranger at Theodore Roosevelt NP, Independence NHP, and Bryce Canyon NP.

Lee Davis, Yellowstone NP's chief of concessions, has been appointed as the new WASO chief of concessions.

Steve Holder, E&AA life member and former superintendent of Jewel Cave NM, has accepted a position in fire management in the Alaska Regional Office.

Maria A. Burks, Bay District supervisor at Golden Gate NRA, has been appointed to the superintendency of Fredericksburg and Spotsylvania County Battlefields Memorial NMP. Originally from the east coast, she served eight years at Independence NHP before heading west.

"Maria has done an outstanding job working with a variety of organizations that function cooperatively with Golden Gate NRA. Combining this with her managerial skills, she is well prepared to become a park superintendent," said Mid-Atlantic RD Jim Coleman.

Herb Olsen, former superintendent of Cape Cod NS, has accepted a position in the North Atlantic Regional Office. He will be managing the cultural resource programs. His successor at Cape Cod is Andrew T. Ringgold, formerly of the Ranger Activities Division in WASO. Ringgold helped develop the 1985 regulations that limited off-road vehicle use at the seashore.



Claire Hunt, an architecture student at the University of Manchester, England, has completed a 12-week detail in the Southwest Region's Division of Conservation. Hunt participated in this year's ICOMOS summer intern program, during which time she completed a draft preservation plan for Fort Davis NHS. At Fort Davis she also worked side by

side with the Historic American Building Survey team.

Said Hunt, "My first time in the United States has been quite an educational experience. I have been exposed to adobe as a building material, specific preservation challenges, National Park Service preservation policies, the history and characteristics of western frontier forts, and, of course, an opportunity to experience the great American Southwest."

AWARDS

Frederick L. Rath, Jr., who last spring received the honorary degree of Doctor of Humane Letters from the State University of New York, was given the Louise du Pont Crowninshield Award this fall by the National Trust for Historic Preservation. In acknowledging the latter, Fred observed that his early preservation training came through the National Park Service, which loaned him out in 1948 from his position as historian at the Home of Franklin D. Roosevelt to assist in the movement to establish the Trust, a story he told in the November 1988 *Courier*. When Congressional and presidential approval of the bill creating the Trust was given in 1949, he was named its first director. Both citations pointed out his exemplary standards of scholarship and performance, and his contributions to the development of a preservation movement centered in mainstream American life.

Booker T. Washington NM Superintendent **Ronald J. Mack** presented special achievement awards to seasonal park rangers Connie Mays and Daniel Young, and maintenance worker Ken Arrington recently. The park also achieved a significant milestone in FY89 with a spotless safety record. Safety awards were presented to the entire staff for the successful completion of FY89 without a motor vehicle or lost-time accident. Safety awards were also presented to Park Ranger Alice Hanawalt and Chief Ranger Richard Saunders for the five-year accident free category, and to Administrative Technician Eleanor Long for the ten-year category.

Through **Clarinda A. Begay's** devoted service, the diverse collection of cultural materials at Hubbell Trading Post NHS remained well cared for in spite of the almost one year vacancy in the park curator position. In recognition of her hours of voluntary overtime to maintain the quality of curation, the young Navajo museum technician has been awarded the superior service award. Begay recently completed her fourth year at Hubbell. She modestly attributes her achievement to the fact that she loves her job and loves the duties it involves.

Ted Husted laughed with pleasure when Rocky Mountain RD Lorraine Mintzmyer and Badlands NP Superintendent Irvin Mortenson announced his appointment as an honorary park ranger.



"I always wanted to be a park ranger," he said.

The occasion was a banquet celebrating the park's 50th anniversary at the Wall, SD, Community Center in June. At eighty-six, Ted looks back on more than half a century of important contributions to the tourism industry and the National Park Service, made possible by the same talents that helped him start his business.

It began when he purchased a small bankrupt drugstore in the town of Wall in 1931. Wall's population was only about three hundred—he had to bring in customers from somewhere. That summer was unusually hot and wife Dorothy suggested roadside signs advertising a free glass of ice water. Wall Drug was on its way.

Countless times since establishing his business on the edge of the Badlands Ted Husted has contributed time and money

to projects advancing NPS causes in South Dakota.

In 1939, he was among community leaders successfully supporting establishment of Badlands NM. In 1952, he helped to organize the Black Hills Natural History Association. In 1959, recognizing the growth of Badlands NM, he organized the Badlands Natural History Association. In addition, his rapport with the political leaders of South Dakota helped him and Leonel Jensen, another friend of the park, to have Congress re-designate Badlands NM as Badlands NP in 1978.

Park Ranger Ted Husted is a friend who sticks with you.

Jay Shuler

RETIREMENTS

Several hundred people recently gathered at the Federal Hall NM to honor retiring Manhattan Sites Superintendent **Robert F. Mahoney**, recipient of the prestigious De Witt Clinton award presented by the Grand Lodge Masons of New York State. The last recipient of the award was retired Supreme Court Chief Justice Warren Burger.

Mahoney's approximately 20-year NPS career was spent in Washington and New York City where he helped plan the legislation that created Gateway NRA. He also held several posts at Gateway prior to assuming the superintendency in 1983. As Manhattan Sites superintendent, Mahoney is credited with such accomplishments as reopening Hamilton Grange, removing graffiti from General Grant NM, rehabilitation of Castle Clinton, and rehabilitation of Federal Hall.

Effective December 30, **Mohammed (Mo) A. Khan** is retiring from the National Park Service. He and his family will relocate to Northern California and invite their NPS friends to visit them. Mo Khan can be reached at P.O. Box 1292, Willits, CA 95490.

Rocky Mountain Region Chief of Construction and Maintenance **Carl Skyrman** retired in October after 25 years of federal service. A 1962 Oregon

State University graduate in landscape architecture, he oversaw construction and maintenance in 41 parks, monuments and recreation areas of the national park system. He is the recipient of the Department of the Interior's Superior Service Award. Carl and his wife, Ingrid, will be relocating to Lucile, ID, to develop their 30-acre homestead along the Salmon River.



Daniel R. Kuehn, Gettysburg NMP superintendent, has retired after 31 years of federal service. Even though his tenure at Gettysburg was brief his accomplishments were many and include closing the Gettysburg National Cemetery to vehicle traffic, reversing the direction of the battlefield auto route to follow the actual order of the battle and helping to develop boundary legislation for Gettysburg NMP, now under consideration in Congress. Kuehn also served as superintendent of Santa Monica Mountains NRA.

Kim Fene retired in September after completing 32 years with the National Park Service. His career began with five seasons in Yellowstone NP, followed by service as a combat engineer during the Korean War and graduation from Utah State University with a degree in wildlife management. Various NPS assignments then took him to Theodore Roosevelt NP, Blue Ridge Parkway, Grand Canyon NP, Mesa Verde NP, the Southeast Region, and finally Chattahoochee River NRA.

He and his wife, Anne, continue to live in Canton, GA, where he maintains a large garden and home orchard.

DEATHS

Haleakala NP employee **Nancy Pierce** died October 28 when Aloha Island Air flight 1712 crashed on Molokai. Nancy and her husband, Peter Thompson, superintendent of Kalaupapa NHP, had their home on Molokai. Nancy had worked at Haleakala since May 1989. She had a masters degree in communications and a bachelors in parks and recreation administration. Her NPS career had taken her to Yosemite NP, Mount Rainier NP, Canyon de Chelly NM, and Crater Lake NP, before Kalaupapa NHP and Haleakala NP.

■ **Calvin Pride, Jr.**, 68, died August 28 after suffering a stroke while fishing. Nicknamed "Ham" by friends and coworkers, he had retired as an Andersonville NHS engineering equipment operator in December 1986. Pride began employment with the Andersonville cemetery after World War II, then joined the Park Service when the national cemetery and historic Civil War prison site were transferred from Army to NPS oversight. Pride was buried at the Andersonville National Cemetery with full military honors. He is survived by his wife, Willie Mae (P.O. Box 12, Andersonville, GA 31711), 5 sons, 2 daughters, 13 grandchildren, and 2 great-grandchildren.

■ **Robert (Bob) Gray**, chief appraiser in WASO's Land Resources Division, died on September 15. Condolences may be sent to his wife, Margaret (4647 Seminary Road, Apt. 201, Alexandria, VA 22304).

■ Born on September 19, 1904, **Erma M. Tobin** died of a heart attack on September 15, 1989, in Hacienda Heights, CA. She was the granddaughter of Charles Keller, who once collected park

fees from Horace Albright at Rocky Gulch in Sequoia NP. She was the daughter of Carl Keller who was a ranger/packer for the Stephen Mather party when they toured Sequoia in 1915. She was the wife of Daniel James Tobin, who was the assistant superintendent of Sequoia NP, superintendent of Lassen NP, assistant director of Region I in Richmond, VA, and the first regional director of Region V, now the Northeast Region. During these thirty-eight years she was active in community and social functions and earned a reputation for friendly hospitality to all—regardless of rank. After Dan's retirement, the couple spent fifteen happy years in Sonoma before his death in 1976.

Known as Tobie to her friends, Erma grew up in Sequoia NP. She was often carried on one side of a mule, her brother on the other, when her father made backcountry trips to work on the trails. She climbed Moro Rock before the steps were built (her father supervised the building of the first wooden stairs). Her mother was the postmistress at Giant Forest in Sequoia.

She and Daniel met many illustrious people through the years, among them Death Valley Scotty who hated the "feds." Dan walked up to Scotty's door to introduce himself, and the couple became friends and guests of Scotty's during the time that Death Valley was supervised from Sequoia.

Erma and Daniel had three children, Daniel J. (Jim) Tobin, Jr., who died in 1985, JoAnn (Mrs. Charles T. Bell), and Charles (Chuck) Tobin who works in Yellowstone NP. There are seven grandchildren and eight great-grandchildren. She is also survived by her brother of San Clemente, CA. Those who wish to make a memorial donation in her memory should send their gift to the Education Trust Fund, E&AA, P.O. Box 1490, Falls Church, VA 22041, or to the Heart Fund.

■ **John C. Preston**, 91, died recently in Carmel, CA. Born in Fort Collins, CO, he graduated from the University of Montana with a forestry degree. He took the first park ranger examination ever offered in 1927, and entered on duty as a Rocky Mountain NP ranger at an annual salary of \$1,320, less \$180 for quarters. In

August of that year he married Betty Milner, and lived with her for 62 years. Preston was one of Stephen Mather's men. His career spanned seven NPS directors, George B. Hartzog, Jr., being the last.

Preston worked his way up from ranger to assistant superintendent at Rocky Mountain NP, before he went to Lassen Volcanic NP as its superintendent, and on to the superintendencies of Mount Rainier, Great Smoky Mountains, and Yosemite NPs. He received the Distinguished Service Award before he retired, then came back after retirement to serve as a hearing officer for the Service in connection with the Wilderness Act.

His wife, Betty (8545 Carmel Valley Road, Carmel, CA 93923), suggests that those wishing to remember John may send a donation to the Education Trust Fund, E&AA, P.O. Box 1490, Falls Church, VA 22041.

TPS

Technical Preservation Services

FALL 1989

NEW PRESERVATION BRIEFS

Preservation Briefs 19: The Repair and Replacement of Historic Wooden Shingles Roofs. Sharon C. Park, AIA. GPO stock number: 024-005-01053-0. \$1.00 per copy.

Preservation Briefs 20: The Preservation of Historic Barns. Michael J. Auer. GPO stock number: 024-005-01054-8. \$1.00 per copy.

Preservation Briefs 21: Repairing Historic Flat Plaster - Walls and Ceilings. Marylee MacDonald. GPO stock number: 024-005-01055-6. \$1.00 per copy.

Order new PBs from: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402-9325. All prices include postage and handling. Check payable to: Sup. Docs. 25% discount on 100 or more copies of one title sent to the same address. Book-sellers: 25% discount on any order; include your license number.

For a free historic preservation catalog listing our other publications, write: National Park Service, PAD (424), P.O. Box 37127, Washington, D.C. 20013-7127.

U.S. Department of the Interior National Park Service
Preservation Assistance Division Technical Preservation Services

BUSINESS NEWS

E&AA is pleased to announce the reprinting and availability of "What's Cooking in Our National Parks" for \$8.95 per copy, plus \$3 (shipping and handling; Colorado residents please include 3% sales tax). The cookbook originated as a Western Region project and was first made available in 1973. In presenting the cookbook, then Western Region RD Howard Chapman dedicated it to the NPS family, advising that all proceeds should go to the Education Trust Fund. Through the years, the fund has received more than \$18,000 as a donation from sales. William R. Jones, president of Outbooks, Inc. (2487 Industrial Blvd., #2, Grand Junction, CO 81505) — a DSC alumnus and E&AA life member — generously volunteered to reprint the cookbook when it was no longer available for sale. Those wishing the cookbook should fill out the coupon.

Zion National Park Women sent the Education Trust Fund a check for \$1,000, collected from the sale of their cookbook. The sum was double last year's donation, which the women's organization and E&AA were delighted about. The cookbook can be purchased from Zion

Park Women, P.O. Box 22, Springdale, UT 84767, for \$6 per copy.

E&AA is pleased to announce the appointment of Granville B. Liles (3 Fox Chase Road, Asheville, NC 28804) to the position of Special Membership Chairman. Granville retired as Blue Ridge Parkway superintendent after a 37-year federal career. His oldest son, Jim, is the assistant superintendent at Buffalo NR. Granville has some innovative ideas for increasing E&AA membership, including the reinstatement of E&AA chapters.

MEMBER NEWS

Robert H (Bob) Coombs retired on June 1, 1972, as DSC's regional coordinator. Recently he decided to join E&AA, and asked about a former ranger buddy, Thomas K. Garry. Garry had been one of five rangers on staff at the Blue Ridge Parkway in the 1940s. E&AA located him in Roberts, MT, where he now lives after retiring in 1968 as Custer Battlefield superintendent. E&AA also uncovered the fact that his son, Bill, is following in his father's footsteps, except

that Bill is making his mark in the Alaska state park system. Formerly superintendent of Kenai State Park, he recently accepted an administrative assignment in Juneau.

E&AA Life Member Elizabeth Novak Olson (19 Racquet Drive, San Rafael, CA 94901) plans to attend E&AA's Biennial Reunion planned for Glacier NP in September 1990, and meet up with Howard Baker's "Midwest Voyageurs." She and Fred were married in 1939 when Fred was stationed at Glacier.

E&AA life member and Southwest Region Environmental Historian Richard W. Sellars donated a \$500 honorarium he received from a New York presentation at the Cultural Heritage Conference to the Education Trust Fund. His July 1989 Courier article, "Scenery vs. Ecology in the National Parks," also brought a new and unexpected life member to E&AA. Sherry Wright Brichetto (115 Via La Cumbre, Greenbrae, CA 94904), daughter of George Melendez Wright, joined the association and simultaneously donated \$100. Her aunt is Mrs. Ben H. (Jane) Thompson, whose husband retired as WASO's assistant director for resource studies in 1964. The Thompsons now live at P.O. Box 7, Glenwood, NM 88039.

Vere L. (Griff) Griffen who retired as an electrician from Everglades NP in 1973 will be celebrating his 87th birthday on January 15, 1990. Prior to working at the Everglades, he served at Fort Jefferson NM for four years. His current address is Route 1, Box 513-C, Big Pine Key, FL 33043.

OOPS!

The Park Briefs section of the July Courier reported that Father Damien de Veuster is buried close to the church he built at Kalawao, now part of Kalaupapa NHP. In reality his remains were disinterred and sent back to Belgium. Our apologies!

WHAT'S COOKING IN OUR NATIONAL PARKS

Please send _____ copy(ies) at \$3 per copy of *What's Cooking in Our National Parks* (Colorado residents please include 3% sales tax)

Name _____

Address _____

City _____ State _____ Zip _____

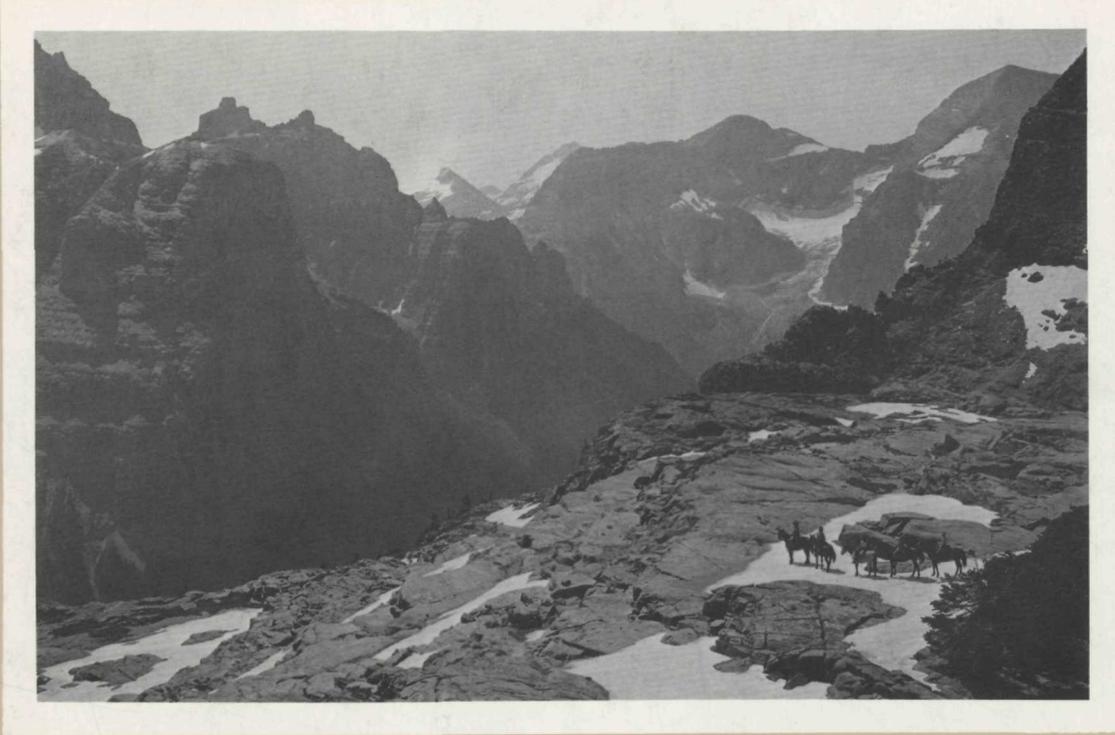
Check one:

As a member of E&AA, I am enclosing my check in the amount of \$_____.

Because I am not a member, I also remit \$_____, which represents my dues for membership in E&AA (Annual dues \$10; Life Membership \$100; payable in a lump sum or in two or four equal annual payments).

Make check payable to E&AA. Please send to: Treasurer
E&AA
P.O. Box 1490
Falls Church, VA 22041





U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
P.O. BOX 37127
WASHINGTON, D.C. 20013-7127

POSTAGE & FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
G-83