

# National Parks & Conservation Magazine

The Environmental Journal

July 1976



*Bob Hines*

# BICENTENNIAL REFLECTIONS

**T**ALL SHIPS ride through the Bay, the Narrows, into the Harbor, high sails, great towers of billowing canvas. Drawn from around the world, they celebrate from all the world our Liberty.

Hundreds and hundreds like them crossed the seas to bring their human freight, three hundred and fifty years ago, two hundred from the time we celebrate. Young men they carried for the most part, young women following, breaking from home and family, striking free, severed from crowded cities, hunger, impressment, indentured servitude.

Their conquest of the continent we know full well, the Conestoga wagons climbing the Appalachians, the prairie schooners across the western plains.

Despite our pride of strength, our hearts bear guilt and wonder for the Stone Age cultures that we crushed.

Two hundred years and more we celebrate. We pause, look backward, venture to look ahead.

**T**HE PRIMEVAL FORESTS are gone: axe, fire, farm, village, city. Concerned, at last, we treasure wilderness, would manage forests with a new and loving care.

The endless prairies, gone, the buffalo. And everywhere the soils: gone from the mountains, east and west, worn even from level lands. Hugh Bennett, thirty years ago, thought he had saved them—a fight to be won again in America's future.

That early world, populous with plants and animals, myriad, abundant, long since dispelled, with the men linked close to nature: can change of heart restore it? Here is a work for dedication through decades, generations.

The early towns ran easily to the fields. The central squares brought men together for their trade. The fields restored them to the earth, the singing birds, the whispering trees.

But then the cities came: New Amsterdam, sparkling as delftware, and now the endless barrens of New York.

The deep coal measures drew the iron masters and their men. The Iron City, Pittsburgh, furnaces, fumes, uproar, and fire, the Black Country of America, poisoned its rivers.

The dunes of Indiana, hardly a century past, were doorstep to wilderness at Chicago; now the

great mills, the towers, the traffic—we struggle to preserve small greens of open space, how to reverse the tide, change the urban to a rural drift.

**T**HE AIR WAS PURE, the winds blew free and clean across the mountain passes in Montana, over the prairie, swirled through the Alleghenies, Berkshires, out to sea. Yet even forty years ago industrial haze lay over the continent five thousand feet in depth. We fight to keep clean skies in national parks. The poison vapors choke us in our streets. Can we resolve, cupidities thrust aside, to end this abomination?

The waters once were fresh. A traveler might drink from any stream he found in verdured hills. We set ourselves a national course, a few years back, to make these waters clean again, free from the outfall-stench of cities, poisons of factories. Shall greed for profit force us backward? Shall not we set this goal of purity of waters firmly before us, embarking on our next two hundred years?

The wetlands only recently drew thought from us: marshes and swamps, estuaries, barrier islands, the spawning-places of life, magicians of oxygen. The speculators dredge and fill, the profitable subdivisions spread. Some of us grapple with the problem, too few of us, not well enough. If there is to be an American future, such evil as this must end.

**A**T LEAST throughout industrial times, increasingly, we lived beyond our means in minerals. The richer iron ores, on which we built industrial strength, are gone. Taconite tailings foul our lakes. We reach around the world: Chile, Zaire yield copper, the Arab countries, oil. We recognize the disproportionate draught we take from all the world, fear the defenseless lines of transport, seek an impossible self-sufficiency, venture the ocean deeps. And yet the American future, on the contrary, lies in a well-fashioned interdependence with all nations. The quest for national security demands collaboration.

The earliest power-source was the strong right arm, with hammer or axe, while horse outdid half a dozen men. Then came the hiss of steam, the clattering of engines in the foundries, on the rails. The horseless carriage at the century's turn set us on blacktop roads across the continent. Electric

*Continued on page 31*



# National Parks & Conservation Magazine

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weathered american chestnut trunk  
jack jeffers photograph

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### COVER American Bald Eagle, by Bob Hines

For twenty-eight years artist Bob Hines has been expressing his love of animals in exquisite drawings and paintings of wildlife for the U.S. Fish and Wildlife Service. Largely self-taught, Bob has received many awards for his work. Best of all, he says, is the fact that he works at a task he loves—and it shows. In this rendition of the bald eagle Bob has captured the majesty and spirit of freedom that inspired our Founding Fathers to designate this magnificent bird as the symbol of our nation's strength and independence. Now becoming rare, the bald eagle needs our help to survive. (See page 14.)

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Mariposa Grove, Yosemite Park

*Don't it always seem to go  
That you don't know what you've  
got  
Till it's gone.  
They paved paradise  
And put up a parking lot.\**

CONSIDER A SCENE on a typical summer weekend at the great valley of Yosemite National Park in 1969: Traffic is at a standstill; autos stretch bumper to bumper as far as the eye can see; horns blare; exhaust pipes spew out noxious, odoriferous, visible fumes; a smog cloud hovers two hundred feet above; bottles, cans, and papers litter the ground; people are tense, irritable, and grumpy.

In 1969 park roads in Yosemite had begun to resemble the Santa Monica Freeway at rush hour. Some visitors became so frustrated that they turned around and drove home without ever leaving their cars. Traffic congestion and resultant pollution negatively affected park ecosystems and visitor experiences. But in 1970, the National Park Service (NPS) decided to ban private automobiles from certain roads in Yosemite. In their place, a free transportation system, using propane-powered shuttlebuses, was instituted to transport visitors to various points in the village vi-

\* From "Big Yellow Taxi," by Joni Mitchell.  
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## *In & Around the National Parks:* **ALTERNATIVES to the AUTO**

Visitor transportation systems provide the answer to overcrowding, energy conservation, and resource preservation in the national parks

by ANDREW D. GILMAN

cinity and to Mirror Lake and Happy Isles. The NPS also limited some overflow camping and regulated open campfires to reduce air pollution and reduce litter. The same disgruntled visitors from the year before would have found autoless roads open for strolling and bicycling; clear skies overhead; natural fragrances of trees and flowers; landscape free of litter; and convenient, quiet buses ready to whisk them to desired visitation points.

Yosemite, noted for suffering the most flagrant abuses, unfortunately was not alone in its auto problems. Similar bumper-to-bumper traffic congestion still is not uncommon in Yellowstone, Great Smoky Mountains, and Grand Canyon national parks. Before the institution of a public transportation system, cars traveling the dirt roads of Mount McKinley National Park kicked up so much dust that vegetation began to suffocate, and wildlife was nowhere to be seen.

As a result of such threats to park resources and in an effort to prevent further abuses, the Park Service has expanded the original Yosemite experiment to include free (or low-fee) alternate transit systems in several other National Park Service areas: Mesa Verde, Everglades, Mount McKinley, North Cascades, Guadalupe

Mountains, and Grand Canyon national parks; Point Reyes and Fire Island national seashores; Lyndon Baines Johnson, Carl Sandburg Home, and Fort Matanzas national historic sites; and the Washington Mall. The systems range from 100-passenger multi-unit trailer trains at Grand Canyon to eleven-passenger vans at Carl Sandburg Home.

In the Everglades, the Park Service conducts a one and one-half hour interpretive tour through Shark Valley. "With the public tram service . . . disturbance to plants and animals is significantly minimized. Opportunities to observe wildlife are enhanced," says Assistant Superintendent Claude McClain. When knowledgeable guides spot interesting features, they stop the tram to explain them. "For the visitor," continues McClain, "it is not just riding in a public transportation system, but it is access to a high-quality experience. The depth and breadth of the interpretive program allow us to explain the purposes of the park and to leave lasting impressions about the park. The only negative comment we get is when the service is not running in slack summer months."

These are words of encouragement to Dick Bowser, the acknowledged Park Service transportation expert, who coordinates most of the systems. "I'm a user,"



says Bowser about his attitudes to parks and his belief that more people should be able to see these splendors. "However," he asserts, "we must design use with a maximum amount of conservation." Bowser's facts and figures seem to support the two objectives. He contends that buses can increase a road's capacity by a factor of seven. In addition, on a passenger-mile basis, buses use about one-fifth as much fuel and cause one-sixth the amount of air pollution as automobiles.

Don Humphrey, of the Division of Long Range Planning and Programs, seconds the transportation projects and views a long-term objective to provide "reasonable alternatives to automobiles," whether by foot, bicycle, boat, or tram.

The proposed systems at Cumberland Island National Seashore and other parks, for example, are attempts to effect the necessary compromise between use and preservation. Plans at Cumberland Island call for a ferry to three places on the island and an electric tram on the island, which will be limited to short, low-capacity routes on existing roadbeds. This system will permit the Park Service to control the number of visitors and will facilitate a good distribution of visitors throughout the island.

If properly implemented, transportation alternatives should help the Park Service strike a better balance between its often conflicting missions to provide for both use and preservation. The transportation alternatives may also set a good example for the rest of America on how to plan and operate mass transit facilities.

**I**N ADDITION TO endorsing public transportation within the parks, the Park Service has joined with major bus and rail concerns in an effort to coordinate schedules and routes to parks and to stimulate the use of mass transit to each of the 288 park units, especially to units located within urban areas where public transit is available.

However, coordinating and de-

veloping a "leave the driving to us" policy to parks is more difficult and complicated than operating systems *within* parks. But, assuming one has ample money and fuel, the visitor has many choices. The NPS, in cooperation with the public transit industry (bus, rail, and air), is promoting the use of public transportation as well as packaged tours. This effort has resulted in more convenient schedules, some additional services, improved information, and improved visitor services and programs for nonmotorist visitors.

Greyhound and Trailways bus companies and Amtrak have taken some steps to promote travel to parks, especially packaged, multi-modal tours. But the law of supply and demand traps these carriers in the age-old money bind: Unless more people choose public transportation—an option that needs to be better advertised—running lines to parks is not profitable. More than 90 percent of all park visitors continue to use private vehicles.

Today only three remote areas have direct rail service—Harpers Ferry, Glacier, and Mount McKinley—and this service has limited schedules. Several major parks and most NPS units within urban areas have access by rail to nearby terminals with some form of bus service to the parks.

Amtrak's legislation does not prohibit the reconstruction of spur lines where main lines lie nearby, but the spur lines have low priority because they would be used only seasonally.

All interstate rail, bus, and air schedules show the major NPS areas near their terminals, but information about connecting service with the parks is not readily available.

"Packaged" tours offered by major carriers and travel agencies have become very popular. These tours include transportation, lodging, some meals, and entrance fees. Typically they cost \$50 to \$75 per day if much travel is involved.

Amtrak, major bus companies, and some regional airlines now offer travel passes for unlimited



Mount McKinley National Park



Grand Canyon National Park



Carl Sandburg Home National Historic Site



The Mall, National Capital Parks



Lyndon B. Johnson National Historic Site



Mesa Verde National Park



Shark Valley, Everglades National Park



Point Reyes National Seashore

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travel for a given period of time, similar to the Eurail passes in Europe.

When examining public access to the parks, three problems consistently stand out: cost, convenience, and travel knowledge. At present, travel to parks, especially for families, is still cheapest by private auto. Even if it were more expensive, the car remains more convenient than bus or train. More equipment can be carried, travelers don't experience lapses of time between connections, and cars permit added mobility at the destination. And even with the most complete transit systems—efficient, on time, inexpensive service to parks, shuttles at gateway towns, and public transit within parks—the problem of the average person's lack of travel sophistication would still be a major obstacle. A Park Service skeptic claims "the advent of the automobile caused Americans to lose their talents of discovering how to get places. They don't know about their options." By far the most difficult task will be to educate the public on how to avail themselves of and adjust themselves to the use of mass transit.

Sooner or later America will ac-

cept concepts of Spaceship Earth and learn to deal with the finiteness of its resources. A major step toward this goal will be the gradual end of the love affair with the automobile. But great loves die slowly. The National Park Service policies may encourage other, more permanent relationships to grow.

**T**HE PARK SERVICE can be justifiably proud of its successes in introducing public transportation to the National Park System. However, no amount of careful planning and progressive policies will help the parks unless more money and more personnel are available to implement the programs. The Service may never be able to totally reclaim paradise from the automobile, but enlightened management policies, adequate funding, and a changing attitude toward public transportation on the part of the American public can help to preserve what exists and to maintain it for future generations. ■

**Andrew D. Gilman is a New York-based freelance writer who has spent much time in many of our national parks.**

## Editor's Note

### MORE MASS TRANSIT

Despite public support for increased public transportation within the National Park System, the Administration's budget request to Congress for Fiscal Year 1977 calls for virtually eliminating funds for new service. Implementation of all ongoing studies of possible transportation systems as well as plans for seventeen new studies would be delayed. In addition, the budget request reflects a \$585,000 reduction in maintenance and other funds associated with operation of existing visitor transportation systems.

Although the value of the added protection of fragile ecosystems and increased visitor enjoyment that public transportation systems provide cannot be measured in dollars and cents, the dollar benefits of these systems are

more than realized by the hundreds of thousands of gallons of saved fuel and the money saved in road cleanup and maintenance. In testimony presented on invitation NPCA recently urged Congress to expand rather than cut back this important aspect of Park System management. NPCA has been urging the Office of Management and Budget to permit NPS to continue visitor transportation studies and to implement completed ones. You are free to express your views on the value of public transportation systems in the parks by writing to:

Mr. James L. Mitchell  
Associate Director  
Office of Management & Budget  
Old Executive Office Building  
Washington, D.C. 20503



# PUUKOHOLA HEIAU

## *Birth of a Nation*

Five thousand miles separate Puukohola Heiau in Hawaii and Independence Hall in Philadelphia, but both played an important role in the birth of nations

by JERRY Y. SHIMODA

**I**T IS THE YEAR 1791. The last stone has been placed, the last bunch of *pili* grass has been tied onto the temple, and the last *ki'i* (carved image) has been set in place.

With the bay of Kawaihae behind him, Chief Kamehameha looks up at the finished *heiau* (temple) on top of the hill called Pu'u Kohola, or the Hill of the Whale, and he is pleased. A soft smile crosses his lips as he gazes upon the temple. Even though he is a chief, he helped to build it with his own hands. With the setting sun at his back, he looks at the *heiau* and knows that tomorrow will bring a new and glorious day for him.

The renowned seer of Kauai, Kapoukahi, had said that the temple must be built if he was to bring all the islands of Hawaii under his rule. Now that prophesy is about to come true.

It took many months and a thousand men laboring in the hot sun of Kawaihae to build the *heiau*. At times the fearsome winds from the mountains reached such an awesome force that it seemed as though the gods themselves did not wish the temple completed. But in the end the gods favored Kamehameha for he did everything the *kahuna* (priest) instructed in building the *heiau*. His brother Keliimaikai, a *kahuna*, did not participate in the menial task of building, so that he would remain pure to perform the ceremony required after each phase of the structure was completed.

But now the temple is finished, and Kamehameha's war god, Kūkailimoku, demands a human sacrifice before he will bestow his blessings upon Kamehameha and give him the power to conquer all of Hawaii. There is one who would be a worthy sacrifice—Keoua Kuahu'ula, Kamehameha's cousin and only remaining rival on the island of Hawaii.

Things have not been going very well for Keoua lately. Part of his army was destroyed by Pele, goddess of the volcano, as the men crossed Kilauea Crater. She sent forth a mighty steam blast to destroy the warriors; and when it was all over, only their footprints remained. (These footprints can still be seen today at Hawaii Volcanoes National Park.)

Keoua has heard, too, that Kamehameha, The Lonely One, has completed his great *heiau*. The Lonely One also continued to win battles as the work on the structure progressed because he observed the correct ceremonial rituals.

Keoua knows, deep in his heart, that his cousin is the chosen one. Although he has never admitted it, he has known it ever since he heard that Kamehameha lifted the Naha Stone as a young man. For an ancient legend had foretold that he who lifts the Naha Stone would rule all of Hawaii.

Thus, resigned to his fate, Keoua accepts Kamehameha's invitation to attend the dedication of Puukohola Heiau. He decides to go by

canoe to this *luakini heiau*, or royal *heiau*. On the way, Keoua stops to wash himself at a spring to prepare himself for his fate. As Keoua's canoe rounds a point, he has his first glimpse of the magnificent *heiau* on the hill overlooking the bay.

Kamehameha has received word of Keoua's approach and prepares to meet him. As Keoua steps off his canoe, one of Kamehameha's warriors kills him. His companions are also slain. Keoua is then offered as the principal sacrifice, with eleven others, to the war god.

Now the whole of the island of Hawaii belongs to Kamehameha. He sleeps well that night as he dreams of future conquests and the consolidation of all the islands of Hawaii under his rule.

**T**HE REST IS HISTORY, for we know that Kamehameha I did indeed conquer the islands of Maui and Molokai in 1794 and the island of Oahu in 1795. His invasion of the island of Kauai was thwarted in 1796 when high seas swamped his invasion fleet. Nevertheless, the king of Kauai accepted the inevitable and placed himself under the rule of Kamehameha I in 1810. He sent his own son to Kamehameha's court as a hostage.

With Kauai came the island of Niihau, and the prophesy was fulfilled. He who had lifted the Naha Stone and built Puukohola Heiau did in fact rule the Kingdom of Hawaii.

But today, within the boundaries of Puukohola Heiau National Historic Site, Puukohola Heiau is only one of the historical and archaeological features, although it is the principal one. The site, authorized by Congress in August 1972, consists of 76.65 acres from the Queen Emma Estates and the State of Hawaii. Other features include the Mailekini Heiau; the Hale-o-kapuni Heiau; the John Young House Site; Pelekane, which was the palace grounds; Alapai's Leaning Stone, or Kamehameha's Chair; and some pictographs.

The Mailekini Heiau was the *heiau* of Kamehameha's ancestors. It is located between Puukohola

Heiau and the area called Pelekane. During the reign of Kamehameha I, posthumously called Kamehameha the Great, one of his two foreign advisors, an ex-English seaman named John Young, placed cannons in Mailekini Heiau and converted it into a fortress to protect Kawaihae Bay.

Legend says that the Hale-okapuni was a *heiau* built in the waters of the bay for the shark god. There is, however, also a story that says that the structure was a fish trap. Today it is buried in silt that has been carried by flood waters into the bay. It remains for underwater archaeologists to determine the nature and size of the structure.



PHOTOGRAPHS BY M. WOODBRIDGE WILLIAMS, NATIONAL PARK SERVICE

Only parts of the four walls and the limestone plastering remain of the house that was once the home of John Young. He was called Olohana by the natives because the ex-seaman had the habit of saying, "All hands!" whenever he called them to him. Kamehameha I eventually made Young a Hawaiian chief for his loyal services as well as governor of the island of Hawaii, in which capacity he served from 1812 to 1820. Young was responsible for making it possible for the first missionaries to land in Hawaii in 1820. He married Kamehameha's niece who bore the mother of the child who would one day become Queen Emma, from whose estate comes part of the land that makes up the historic site.

Pelekane is located below Mailekini Heiau in the beach area. Here, Kamehameha the Great's son, Kamehameha II, or Liholiho, readied himself to take over as ruler of Hawaii after his father's death in 1819.

Between the Mailekini Heiau and the beach area is Alapai's Leaning Stone. Some people call it Kamehameha's Chair. Others say that Kamehameha's Chair is located elsewhere. In any event, tradition has it that Chief Alapai Nui rested against the stone as he amused himself by watching sharks devour the rotting human flesh he placed in the water.

The pictographs are located above Pelekane on the stone wall of a gulch. Archaeologists must analyze these pictographs before

any definite statements can be made about their origin or significance.

Today at Puukohola Heiau National Historic Site a small wooden building serves as an orientation center where a ranger will give you an orientation talk. A self-guiding leaflet is also available. Aided by the leaflet, you can follow the interpretive trail and gain a more intimate understanding of the area's significance. As you walk down the trail, buffeted by the brisk winds from the mountains, know that the Hawaiians who built Puukohola Heiau knew the same winds.

**T**HE PARK is an exciting area, for here began the story of the Kingdom of Hawaii, which eventually became a republic, a territory, and then a state. Here is the Jamestown Island of Virginia, the Plymouth Rock of Massachusetts, and the Independence Hall of Philadelphia: the Puukohola Heiau of Hawaii, where the story of the Hawaiian nation began—an integral part of the story of the United States. ■

Superintendent of Puukohola Heiau National Historic Site as well as City of Refuge National Park on Hawaii, Jerry Y. Shimoda was born in Hawaii and brings as special feeling to this evocation of her past. During his nineteen years with the National Park Service Jerry has served at several other historic parks and sites and at Stephen T. Mather Training Center, Harpers Ferry, West Virginia.

*According to oral tradition, the high chief Alapai Nui leaned against this standing rock (above) every evening and threw pieces of human flesh to sharks circling in the bay. Ancient Hawaiians often sacrificed human beings to appease various gods, including the shark gods. Hawaiians constructed the massive wall of Puukohola Heiau (below) in 1791 of waterworn lava rocks and boulders, without mortar. None of the magnificent wooden and thatch structures that once stood within the walls remain. From this temple-fort King Kamehameha I conquered and united the Hawaiian Islands.*





# A GENERATION OF HEROES

Not since the era of the American Revolution has the world seen such a generation of creative political genius

by HENRY STEELE COMMAGER

**T**HE GENERATION that won independence and launched the new United States had a special conception of history, and of America's place in history. They were familiar enough with the past, and with the "lessons" of history that came out of the past. But they did not believe that America was bound by that past or subject to those lessons. It was,

This series of Bicentennial articles will trace some of the events and diverse cultural influences that forged the distinctive character of our nation—and, as elements of our rich American historic heritage, are represented in the National Park System.

*Declaration of Independence, by John Trumbull*

they thought, the special glory of America that it should launch a new era in history, that it should embark upon a series of experiments which had no precedent in the past, but which would provide models for the future. Here in this New World—which was in a sense a new Eden—man was to have a second chance. Here it would be possible to discover whether man was capable of governing himself, whether he could achieve equality, emancipate himself from tyranny and superstition, and create a civilization not only materially rich but morally and intellectually

rich. For here, in the most favorable environment ever vouchsafed mankind, men could work out their destinies free from those ancient tyrannies that had plagued them from the beginning of recorded history: the tyranny of the Despot, the Priest, the Soldier, the tyranny of ignorance and poverty and war. Here, for the first time, it might be possible to show what man was really capable of. . . .

**A**LL THE AUSPICES were favorable—all but the hateful institution of Negro slavery, and most of the Founding Fathers were confident that it was on the way out. There was land enough, as Jefferson said, "for our descendants to the thousandth and thousandth generation," and there was a benign government which—it is Jefferson again—"did not take from the mouth of labor the bread it has earned." Americans enjoyed immunity from the sanguinary wars of the Old World and could look forward—so they thought—to centuries of peace. They enjoyed religious freedom, and freedom from

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those religious antipathies that had made a shambles of so many Old World societies. They were an enlightened people, with the highest standards of literacy anywhere on the globe; they cherished science and education, and made the benefits of both available to the whole of society. Thanks to a century and a half of self-government in town meetings and county courts, they were more mature politically than any other people, and more creative too.

It is that creativity, particularly in the political arena, that is most impressive. It is no exaggeration to say that the generation of the Founding Fathers was politically the most creative of any in modern history. For the Americans proved themselves able to do what the statesmen or philosophers of the Old World would not do: translate principles into institutions.

Consider the principles set forth so eloquently in the Declaration of Independence:

That all men are created equal;  
That they are endowed with "unalienable rights";

That these rights embrace life, liberty, and the pursuit of happiness;

That it is to secure these rights that governments are instituted among men;

That governments so instituted derive their just powers from the consent of the governed;

That when government becomes destructive of these ends, men may "alter or abolish it";

That men have the right to institute new governments designed to "effect their safety and happiness."

The Founding Fathers did not invent these principles; they did something more important, they put them into practice, and institutionalized them. John Adams put it most succinctly: "they realized the theories of the wisest writers."

**C**ONSIDER THE PRINCIPLE that governments "derive" their powers from consent of the governed. All very well in theory, but how translate that theory into

practice? No people had ever done so before. The Founding Fathers solved this problem with one of the great inventions in the history of politics: the constitutional convention, the most fundamental of all democratic institutions. The constitutional convention *is* the sovereign people, organized for political action. It alone has the right to alter or abolish government and to institute new governments. State constitutional conventions have been doing this with some regularity for two centuries. There has never been a second federal constitutional convention, but the Framers provided for the continuous modernization of the Constitution through the process of constitutional amendments: even now, 187 years after the original convention, the people, through their state legislatures, are voting on an amendment that provides equal rights for women.

Turn to the second great principle: that all government is limited. It is a principle implicit in the whole of the Declaration: that there were limits to the power of government, and that what George III and Parliament were doing was contrary to fundamental law. The principle was an ancient one, but so far no people had ever been able to impose limits on their kings or their governments. The history of government—as Americans read it (and not incorrectly)—had been an unbroken record of tyranny, and as they looked across the Atlantic at France and Prussia and Russia and even Britain they could see that tyranny still flourished everywhere in the western world.

This problem, too, the Founding Fathers solved, first in the states and then in the federal government. What a plethora of devices for limiting government!: first the written Constitution itself, then separation of powers, annual or frequent elections, the distribution of powers among state and federal governments, and on top of all this, elaborate bills of rights setting forth the boundaries of constitutional governments. Within a few years there was added to this network of limitations one that

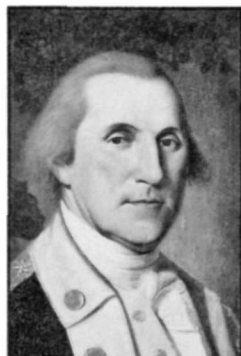
was distinctively American: the practice of judicial review.

We take for granted limitations imposed by people upon their rulers, and so, too, limitations imposed by majorities upon dissident or recalcitrant minorities. What is remarkable is the spectacle of a people imposing limitations upon themselves, even of majorities imposing limitations upon themselves. That requires a degree of moral and political sophistication rare in human experience. Yet that is precisely what Americans of the Revolutionary era contrived and—perhaps even more surprising—what Americans of subsequent generations have accepted. The United States is one of the few democracies in the world that voluntarily imposes limits upon the exercise of democracy. Elsewhere in the western world the majority will is conclusive; in the United States it is subject to fundamental principles of constitutionalism and law, principles that are assumed to embody natural rights or—to revert to the phrase of the Declaration—the laws of Nature and Nature's God.

**I**T WAS MORE DIFFICULT to give life and body to the abstract principles of the Declaration than to contrive the constitutional mechanisms, and we must confess that the fulfillment of this achievement still eludes us. What shall we say of the assertion that "all men are created equal"? That is one principle that was not translated into reality at the time and has not yet been fully realized. But it was, after all, the Enlightenment that laid down the principle in all sincerity. When Jefferson wrote that "all men are created equal," he meant it in a quite literal sense. He meant that in the eyes of Nature all men are *born* equal. The inequalities of color, race, sex, class, wealth, even of talents, do not derive from birth or from Nature, but from society. Jefferson, and many of the signers of the Declaration, were lifelong opponents of slavery, and Jefferson himself contributed more to its eradication than any other man of his time.

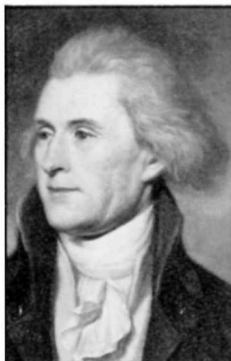


Portraits from Independence National Historical Park collection, except as noted



George Washington

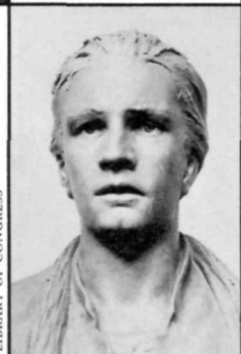
The Foundation of our Empire was not laid in the gloomy age of Ignorance and Superstition, but at an Epoch when the Rights of Mankind were better understood than at any former period.  
—George Washington



Thomas Jefferson



Benjamin Franklin



Nathan Hale

I only regret that I have but one life to give for my country.  
—Nathan Hale

These are the times that try men's souls.  
—Thomas Paine

I have not yet begun to fight.  
—John Paul Jones



John Paul Jones



Thomas Paine



Mad Anthony Wayne



George Rogers Clark

And, as with so much of the Declaration, the words "Created equal" came to have a life of their own. They became, in the end, not so much descriptive as prophetic. For, as Lincoln said in 1857, the Fathers "meant to set us a standard for a free society which should be familiar to all and revered by all; constantly looked to, constantly labored for, and even though never perfectly attained, constantly approximated and thereby constantly spreading and deepening its influence and augmenting the happiness and value of life to all people of all colors everywhere." The long delay in giving even an approximation of equality to Negroes and minority groups is the great American tragedy.

"Pursuit of happiness" is a more elusive phrase. The idea that God and Nature intended that men should be happy was a commonplace of eighteenth century thought. In the Old World, however, happiness tended to be an elitist concept, something that the upper classes might enjoy through the cultivation of art and music and learning and the social graces. But as America had no upper classes, happiness here was supposed to be available to all who were free, and it consisted not in the enjoyment of the arts or philosophy, but in material well-being: milk and meat on the table and bread baking in the oven, a well-built house and a well-filled barn, schooling for children, freedom from the tyranny of the State or the Church or the military, freedom to move to any state, to work at any job, to marry any man or woman, to worship in any church. After almost two centuries most Americans still think of happiness in these terms. . . .

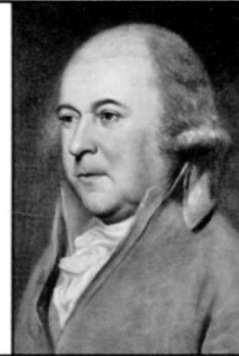
THE REVOLUTION contributed richly to the nourishment of a sense of unity among the melting pot of the American people. It proved, indeed, a veritable cornucopia of heroic deeds, noble characters, and eloquent rhetoric; it provided a kind of instant historical past. There was Captain Parker at Lexington Com-

mon: "if they mean to have a war let it begin here," and the Minute Men at Concord Bridge firing the shot heard 'round the world. There was Prescott at Bunker Hill (really Breed's): "don't fire until you see the whites of their eyes." There was Ethan Allen before Ticonderoga, invoking the aid of the Great Jehovah and the Continental Congress. There was Nathan Hale at the foot of the gallows regretting that he had but one life to lose for his country. There was the flamboyant John Paul Jones, closing with the *Serapis*: "I have not yet begun to fight." There was Tom Paine writing the *Crisis* papers on a drum head by the flickering light of camp fires: "These are the times that try men's souls." There was Mad Anthony Wayne storming Stony Point, and George Rogers Clark wading through the swollen waters of the Wabash to capture Vincennes, and Daniel Morgan smashing Tarleton at Cowpens.

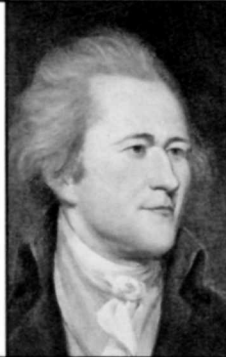
Above all there was Washington—Washington taking command under the famous elm in Cambridge, Washington driving the British from Boston, Washington crossing the Delaware on Christmas night and turning the fortunes of the war, Washington surviving the terrible winter at Valley Forge, Washington leading the remarkable forced march from New York to Yorktown and triumphing there as the British played "The World Turn'd Upside Down"; Washington at Newburgh, as he fumbled for his glasses: "I have grown gray in your service and now find myself growing blind"; Washington taking the oath of office as first President of the Nation he had helped to bring into being; Washington even in Heaven, his triumphal entrance fully authenticated by the authoritative Parson Weems.

Washington looms like some god over that whole galaxy of Plutarchian heroes: when was any other Nation so fortunate in its heroes? There was John Adams, the "Atlas of Independence," and Thomas Jefferson writing the Declaration in that little room in Philadelphia he had rented from the bricklayer

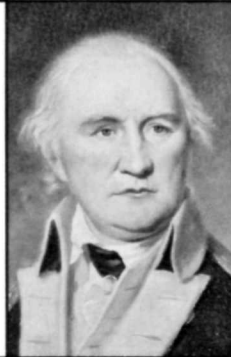
I am well aware of the toil, and Blood, and treasure that it will cost us to maintain this Declaration, and support and defend these states. Yet through all the gloom, I can see the rays of ravishing light and glory.  
—John Adams



John Adams



Alexander Hamilton



Daniel Morgan



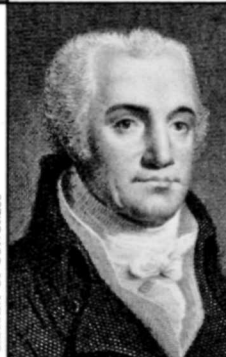
George Mason

S. COOPER DAWSON, JR.,  
DESCENDANT OF GEORGE MASON



James Madison

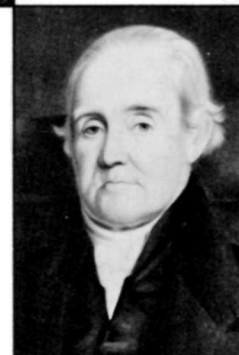
If they mean to have a war, let it begin here.  
—Capt. Parker, Lexington  
  
Don't fire until you see the whites of their eyes.  
—Prescott, Bunker Hill



Joel Barlow



St. Jean de Crèvecoeur



Noah Webster

NATIONAL PORTRAIT GALLERY,  
SMITHSONIAN INSTITUTION



Graff, and going on from there to immortality. There was Tom Paine furiously dashing off *Common Sense*, which did so much to win over public opinion to the necessity of independence, and the venerable Benjamin Franklin winning all hearts over in Paris, and winning French aid, too, and coming back at the age of 81 to add his prudence and his wisdom to the deliberations at the Constitutional Convention. For the pen was as mighty as the sword: the youthful Hamilton drafting so many of Washington's papers and then drafting a good part of the *Federalist Papers*; James Madison pushing through the immortal Statute of Religious Freedom for Virginia and joining in with Hamilton to write the *Federalist Papers*; George Mason with his great Bill of Rights for Virginia, which became the model for the bills of rights of other states and of the United States, too. Nor must we forget gentle Philip Freneau with his stirring poems, and Joel Barlow with his gargantuan *Vision of Columbus*, or the "American Farmer," Hector St. Jean de Crèvecoeur, with those famous *Letters*, or Noah Webster already busy making an American language.

**H**OW EXPLAIN this outpouring of political genius—and political leadership—in the America of the Revolutionary generation? We have seen nothing like it since, nor for that matter has any nation. The practical explanation is that in the simple, rural America of that day there were few other outlets for genius than those offered by public service: after all, there was no court, no church, no aristocracy, no army or navy, no great universities or learned academies, no banks or commercial companies like the East India or the Hudson's Bay. Talent went, almost by default, into public life.

A second practical explanation is that though the total adult white male population of America was very small—certainly well under one million—Americans, unlike the peoples of the Old World, used what they had. In Europe . . . access

to public life was limited strictly to members of the aristocracy and the upper classes.

There is, too, a third reason that might be denominated practical, and that is the reason of necessity. Has any generation in our history been called upon to do more than this generation was required to do: win independence, set up state governments, write a constitution, create a federal system, win the trans-Allegheny West and set up territorial governments there, create a nation, and fabricate all those institutions that go to making the Nation strong and progressive? There is nothing like war for bringing out courage; there is nothing like emergency for bringing out ingenuity; there is nothing like challenge for bringing out character.

But there was more to it than these practical considerations, important as they were. There was a common training in the classics—those of Greece and Rome and those of seventeenth-century England. All of the Fathers knew Thucydides and Plutarch with their celebration of civic virtue and of public service. All of them might have said, with the Reverend Jonathan Mayhew, "having been initiated in youth with the doctrines of civil liberty, as they are taught in such men as Plato, Demosthenes, Cicero, and other persons among the ancients, and such as Sidney and Milton, Locke and Hoadley among the moderns, I liked them; they seemed rational." There was the deep sense of obligation to posterity, a note that runs through the whole of the public and private literature of the day.

Let three examples suffice. Listen to Washington's appeal at Newburgh: "You will, by the dignity of your conduct, afford occasion for posterity to say, when speaking of the glorious example you have exhibited to Mankind, 'had this day been wanting, the world had never seen the last stage of perfection to which human nature is capable of attaining.'" Recall Tom Paine's plea for independence: "'Tis not the concern of a day, a year, or an age; posterity

are involved in the contest and will be more or less affected to the end of time." Ponder John Adams' touching letter to his wife when he had signed the great Declaration: "Through all the gloom I can see the rays of ravishing light and glory. Posterity will triumph in that day's transaction, even although we should rue it, which I trust in God we shall not."

**A**S THE eighteenth century identified God and Nature, so the Founding Fathers tended to identify Man and Mankind, and the Present and Posterity. Their service was not wealth but to the commonwealth; their obligation not merely to their own day or their own society but to Posterity.

**Henry Steele Commager, one of this country's foremost scholars of American intellectual and constitutional history, brings a lifetime devoted to study of the American experience to this assessment of our Founding Fathers' achievement. Just a few of his important works include *The American Mind*, *The American Character*, *The Growth of the American Republic*, *The Spirit of Seventy-Six*, and a projected new series, *The Rise of the American Nation*. This article is excerpted and adapted from the brochure, *Our Revolutionary Heritage*, published by the National Park Service. Order from Superintendent of Documents, Government Printing Office, Washington, D.C. 65¢. Stock #024-005-00592-7.**

*A nationwide ringing of bells on July 4, 1976, in conjunction with the ringing of the Liberty Bell at 2:00 pm (EDT) heralded our country's entrance into its third century. Independence National Historical Park in Philadelphia is the central focus among many other Revolutionary era National Park System units in this Bicentennial year. There you can visit the place where Jefferson drafted the Declaration of Independence, Independence Hall where the Declaration and the Constitution were forged, the tavern where the Founding Fathers discussed ideas that were incorporated into these important documents, displays on the many facets of Benjamin Franklin's life, and a gallery of portraits of famous Revolutionary personalities.*

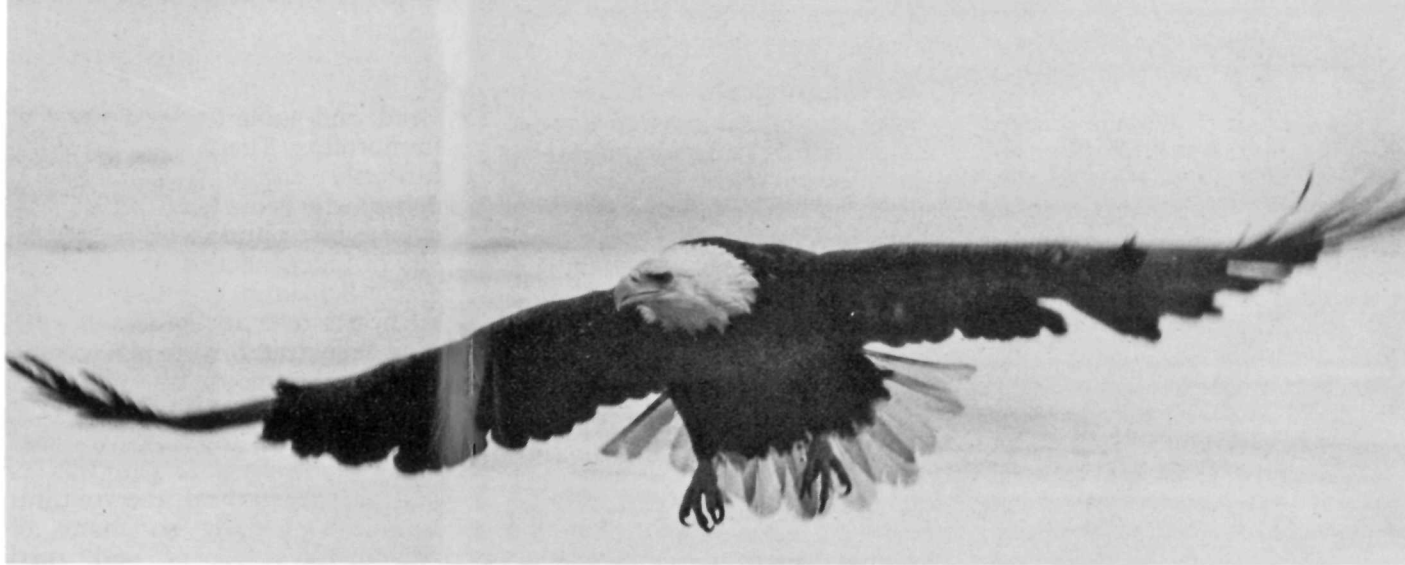
# The Bald Eagle: 1776-1976

Ironically, our national symbol, the American bald eagle, needs continuing help for its survival

article by DAVID B. MARSHALL

& PAUL R. NICKERSON

photographs by JOHN E. SWEDBERG



LIKE WOLVES, bears, lions, and tigers, large birds of prey have captured man's imagination through the centuries. Ancient myths persist, perpetuated by inaccurate and misleading stories. The bald eagle (*Haliaeetus leucocephalus*), as a bird of prey and our national emblem as well, has not escaped public misconceptions.

Whether silhouetted against the sky on a rocky pinnacle in Alaska or lazily flapping overhead in Florida, the bald eagle is to be admired as one of nature's most successful and spectacular species. An adult bald eagle is undoubtedly magnificent, with its 6½- to 7½-foot wingspan and snow-white head and tail that contrast strikingly with dark body and wings. Bald eagles are about thirty-two inches in length and weigh between ten and fifteen pounds. Like other birds of prey, females are larger than males. Young bald eagles, aside from their size, are relatively unimpressive. Their brownish plumage, mottled irregularly with white, causes them to be confused with other large birds of prey. The white head and tail appear in the fourth and fifth year as the birds approach breeding age.

BEFORE ONE can fully understand the status of the bald eagle, some basic knowledge of its status and ecological requirements is necessary. The bald eagle is one of nine species belonging to a group called fish or sea eagles, but it is the only truly North American representative of this group. In fact,

it is almost entirely restricted to the United States and Canada, reaching Mexico along the Baja peninsula. It barely touches upon Siberia where it breeds on Bering Island of the Komandorskie group.

The United States and Canada harbor only one other eagle, the golden eagle, which is a prairie and mountain bird. It occurs circumpolar throughout most of the Northern Hemisphere and as far south as central Mexico and northern Africa. Although in some places the ranges of bald and golden eagles overlap, each has its own role in our ecosystems, so competition between the two is negligible.

The bald eagle, like other fish or sea eagles, is a bird of aquatic ecosystems. One of our largest raptors, it requires open space for flying and substantial quantities of food. Estuaries, large lakes and reservoirs, major rivers, and some marine habitats form this eagle's home. Nesting distribution and numbers can in part be correlated with miles of shoreline; but such shorelines must have a food base and adequate perching or lookout points and meet certain nesting requirements. Fish are the staple in the diet of the bald eagle, but it also preys upon aquatic birds and some mammals. Although a major share of this food is taken as carrion, bald eagles often use their talons to catch fish swimming near the surface.

In winter large gatherings of bald eagles occur about waterfowl concentrations and fish kills. As the water begins to freeze, healthy wa-

terfowl fly south and the infirm assemble in the last remaining unfrozen pools. They are easy marks for bald eagles. Fish kills occur around major dams and reservoirs, particularly in the central United States. In Alaska dead and dying spawned-out salmon are a staple, but nesting eagles feed on herring, which the adults take alive from tidal pools or while skimming the water's surface.

Although the small and nimble osprey is a far better fisherman, bald eagles are famous for their ability to harass ospreys, causing them to drop their prey, which the eagles then expropriate. At times bald eagles hunt mammals effectively. Several eagles working together have been observed capturing rabbits by flushing them from cover. Nonetheless, bald eagles are opportunists and prefer to utilize carrion or let someone else do the capturing. As such, they feed with gulls and other scavengers where carrion is available. In contrast, golden eagles tend to catch small live mammals in desert, prairie, and mountainous regions. Although golden eagles formerly nested in the Appalachians in fair numbers, the North American population is mainly associated with open country of the West where an estimated 100,000 remain.

Eagles do not have the physical means to carry off large mammals, but golden eagles can kill newborn animals and feed on them in place. Experiments with a captive golden eagle showed eight pounds was

about the maximum it could carry, and even then the bird flew only a few yards. Carrying even four pounds was a strain. These experiments check out with the field observations of reliable observers.

SEASONS AND SITUATIONS in which bald eagles nest vary within the bird's broad range. A sizable portion of the continental bald eagle population is not of breeding age, and another segment fails to nest at all or may nest alternate years. Some nests are used consistently from year to year whereas others are used every two or three years. Some pairs apparently alternate between nests, but in general a nest once built will be used in future years. Nests are often repaired or added to each year but are not necessarily used each year. Some nests are fifty years old or more.

Nest sites vary with geographical areas, with the only consistency being that nests are near water. Over most of their range, bald eagles build their nests near the top of large trees; but in the Aleutian Islands, where no trees are present, they nest on cliff ledges or on "sea stacks" or rocks. Cliff nests occur in other parts of their range, such as in the Southwest where trees are absent.

Although in special circumstances bald eagles nest on the ground, destruction of nesting trees does not convert tree-nesting eagles into ground nesters. Ground nests occur on escarpments that offer protection against ground

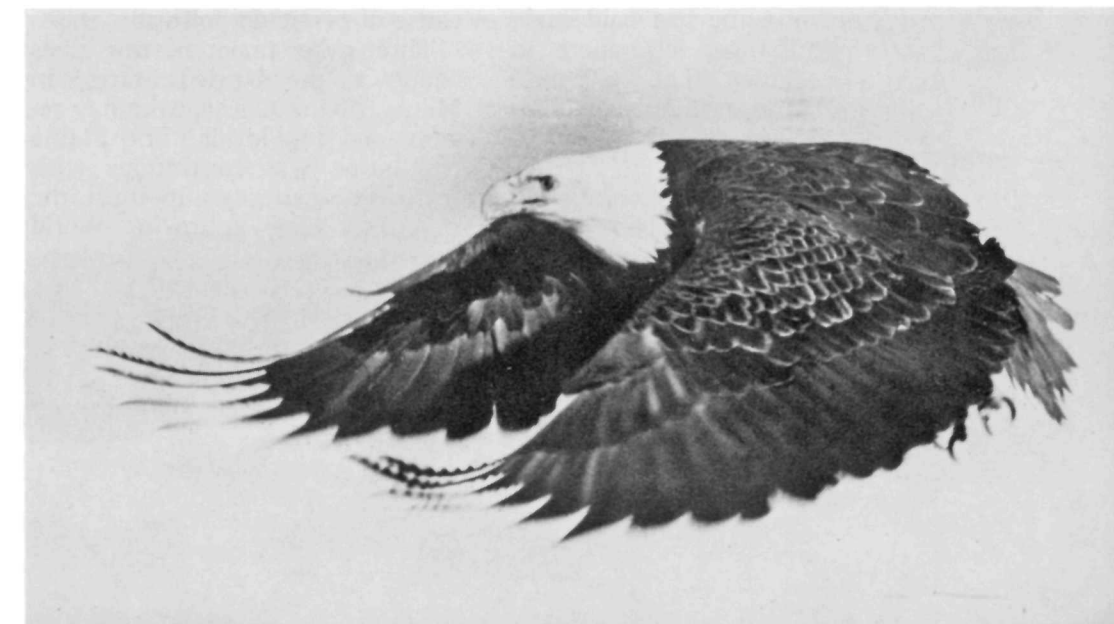
predators. The destruction of nesting trees can mean the end of reproduction for a given pair if suitable alternate trees are not available. Eagles also need perches along shores from which they can take commanding views of their domain.

Bald eagle nests consist of great masses of sticks, with nest cups lined with grasses and other small plants. With years of use the nests become large, conspicuous structures from five to seven feet high and six to eight feet in diameter. The female generally lays one to three eggs, and the incubation period is approximately thirty-five days. The parents share incubation and feeding of the young. During the first three to four weeks of the nestlings' lives, one or both parents are on guard or will brood the young. At several weeks of age the eaglets feed themselves when food is brought to them. In ten to twelve weeks, after much exercising of their wings, the young make their first flight from the nest, usually

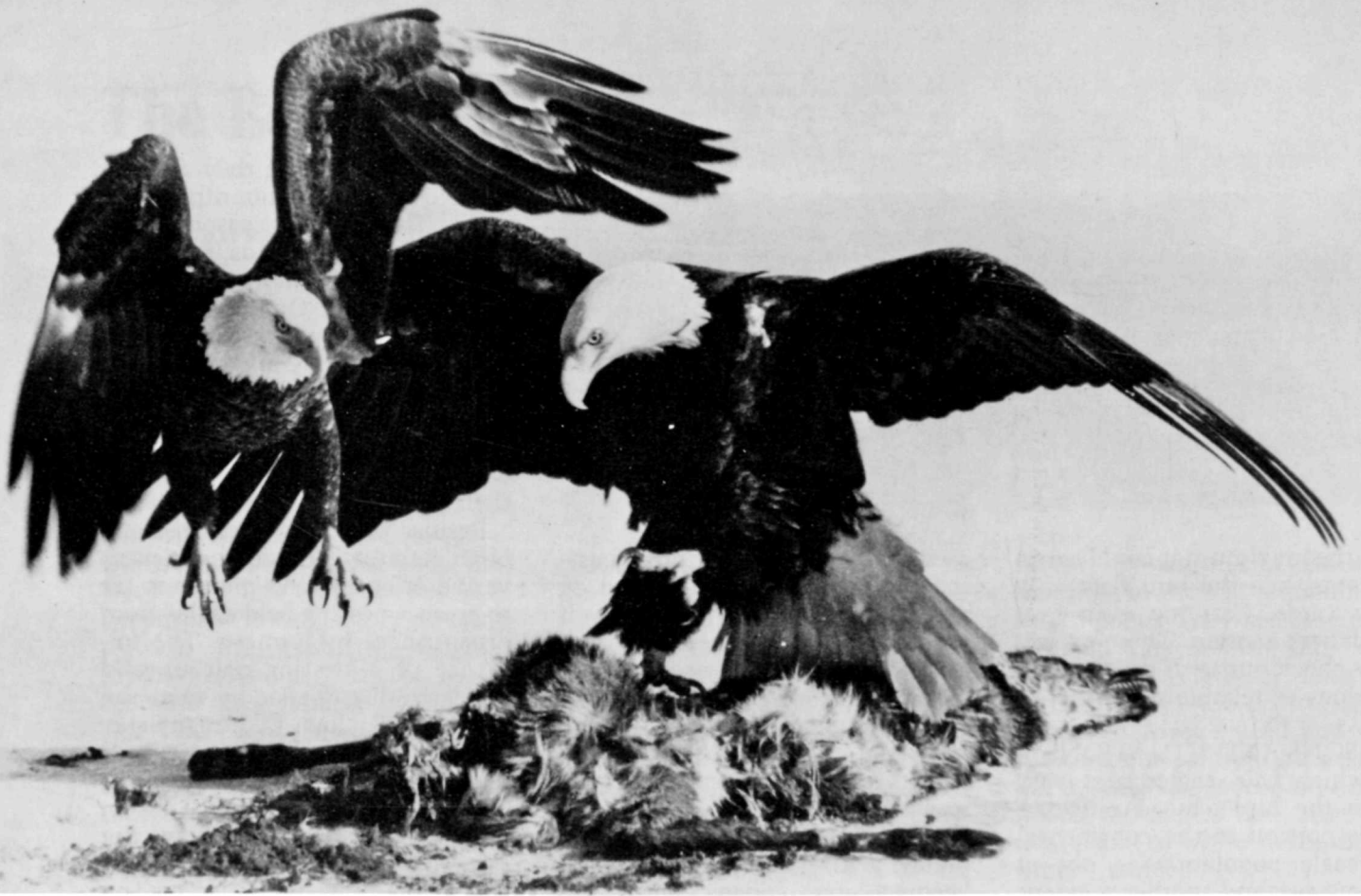
to the ground where they are vulnerable to attacks from other predators. The nesting season varies with latitude. In Florida, territorial defense around a nest site begins in September or October, whereas in Alaska nesting may not begin until early April. Generally one to three months of courtship occur before the first egg is laid. Bald eagles thus nest earlier than most birds, and like other large birds their nesting season is long.

Besides providing nest trees and other habitat components conservation-oriented land managers try to protect nesting bald eagles from disturbances by humans. The tolerance of a nesting pair of bald eagles to disturbance by man can be extremely low. Like many species of wildlife, bald eagles may take up close residence to humans, but they will not always accept humans closing in on them. For example, a productive bald eagle nest adjoins a well-traveled road on one of Washington's San Juan Islands, but the eagles probably chose the site after the road was established.

BECAUSE OF the bald eagle's food and nesting habits, the bird's distribution across North America is not uniform today and never was. Also, because the waters of a major portion of its breeding range freeze in winter, making food unavailable, bald eagles from such regions migrate south. Southern bald eagles, especially immature birds, wander op-







portunistically in search of food. The wandering often takes them north. It is therefore possible to find bald eagles from both the south and north wintering in the same areas of the central United States. Although highly territorial while nesting, bald eagles often concentrate by the hundreds at sites having an abundant winter food supply.

By far the largest nesting group of bald eagles occurs along the coast of Alaska from the Aleutian Islands southward. The rich coast of southeastern Alaska with 12,000 miles of shoreline has bald eagle habitat unmatched elsewhere in North America. The 678-mile shoreline of Admiralty Island supports almost two nests per mile. In winter it is not difficult to photograph as many as one hundred bald eagles at one time in Alaska. Where water remains free of ice, these birds remain year-round. The range of the bald eagle extends southward from Alaska along the coast of British Columbia to Oregon. The San Juan Islands in Puget

Sound off Washington and British Columbia form a major nesting area in this region. In Oregon the bald eagle nests inland along major reservoirs and lakes, and an extension of this population runs into northern California. Eastward, bald eagles nest throughout most of the forested parts of Canada, which are well endowed with large lakes and rivers relatively free of human disturbances. A major nesting area centers in the Great Lakes states of Minnesota, Wisconsin, and Michigan. Few of the birds nest on the Great Lakes themselves because of pesticide pollution.

Three other major nesting areas occur in the United States: in Maine, in the Chesapeake Bay region, and in Florida. The Maine population was continuous with the Great Lakes group until the advent of DDT following World War II. Then healthy populations occurring along the many lakes through New York State's interior disappeared. Today one nesting pair remains in New York.

Small scattered groups of bald

eagles nest in many other areas. Some of these birds are only remnants of pre-white-man or pre-DDT populations. Other nesting populations, such as one that nested along the Hudson River, are entirely gone.

**W**INTERING AREAS are as critical to the bald eagle as nesting areas are. Probably the most important is the Chilkat Valley near Haines, north of Juneau, Alaska. As many as 3,000 to 3,500 bald eagles may be observed there from October to January feeding on spawned-out salmon. A National Audubon Society survey conducted in the 1960s identified four major wintering regions in the forty-eight contiguous states. The Mississippi and Missouri river basins may be the most populated of the four. Here the birds have responded to the presence of manmade reservoirs and national wildlife refuges that afford open water in winter and dead and dying fish and waterfowl.

Large bodies of water in Wash-



ington, Oregon, Idaho, and Montana form another wintering region. Two important areas in this region include Lake Pend Orielle in Idaho and the Klamath Basin along the border of Oregon and California where great concentrations of waterfowl occur. Still another wintering region is the Chesapeake Bay area. Many of the bald eagles that winter in the United States come from Canada.

**H**OW MANY bald eagles are there? How much have bald eagle populations been reduced from former times? Are they still declining? Unfortunately, no precise data are available to answer these questions. No one counted bald eagles two hundred years ago, and methods to count them today are inexact and at best rough estimates of a part of the population. However, the bald eagle was flourishing in 1782 when it became our national symbol and it has since declined greatly. The best index to numbers in the United States now comes from incomplete

nesting surveys compiled by the Fish and Wildlife Service (FWS).

In 1975 the FWS accounted for about seven hundred nests in which eggs were laid within the forty-eight contiguous states. These nests were distributed as follows: Pacific Northwest, including northern California, 180; Great Lakes states, 203; Maine, 31; Chesapeake Bay region, 75; Florida, 145; and all other areas, 39. Other nesting pairs not observed, numerous pairs that did not produce eggs or lost their eggs during the survey year, and immatures and other nonbreeders would be in addition.

The actual number of adults that nest in the forty-eight states is well over 2,000, and nonbreeders would account for another 500 to 1,000 individuals. A sampling of Alaska's bald eagle population indicates the presence of 7,000 to 7,500 breeding pairs plus an unknown number of immature birds and nonbreeders. In 1975 the Conservation Committee of the Wilson Ornithological Society estimated the U.S. and

Canadian population of bald eagles to be between 35,000 and 80,000 birds.

These figures represent far more bald eagles than anyone thought existed a few years ago. However, safety is not in numbers alone. Biologists place more confidence in data showing that a population is producing enough offspring to offset mortality. During the 1950s and 1960s it seemed that the bald eagle in the forty-eight contiguous states was not maintaining itself. A National Audubon Society survey of the forty-eight contiguous states in 1963 identified 417 active nests that produced a ratio of .59 young per nest. The similar but not entirely comparable survey compiled by the Fish and Wildlife Service in 1973 and 1974 yielded ratios of .83 and .78, respectively. An improvement in reproductive rates is therefore indicated, and heretofore unknown pairs have been found in even well-known populations. Much more research must be conducted to determine long-range trends and to make cer-





tain that reproductive rates are sufficient to offset mortality.

In Maine reproduction is known to be insufficient. Since we began keeping records there in 1962, it has been obvious that the Maine population has not been producing sufficient eaglets to sustain itself. For example, active Maine pairs produced only 0.23 young per active nest in 1973 compared to a national average of 0.83. The reasons for this reproductive failure are organochlorine pesticides, particularly DDT and its breakdown product, DDE. Here, as elsewhere, DDT and DDE cause eggshell thinning, which often results in death of the embryo. Even though DDT has not been used in Maine since 1970, bald eagle eggs collected in 1974 contained the highest residues yet reported from that location. We can only speculate as to the persistence of DDE in the Maine environment. We are hopeful that levels will soon show a decline in eagle eggs in Maine, as they have in various species of fish and other birds, once use is ter-

minated. However, for now the picture is rather grim based on the analyses of eggs collected in 1974 and 1975.

In an effort to augment the limited production of the Maine population, the FWS is conducting research to determine if transplanted eggs from Minnesota and Wisconsin can be used to replace eggs laid by the native Maine birds in areas where the reproductive failure is occurring. In 1974 one young was fledged in this operation, and two nestlings resulted from a 1975 transplant. At this writing results of a 1976 project are not in. It was found that parent birds in Maine could be induced to accept foster nestlings, as was previously shown in Michigan by Sergej Postupalsky, who successfully introduced two foster nestlings into two active nests, each of which contained one young. Both introduced nestlings successfully fledged, as did the other young in the two nests into which they were placed. The Maine and Michigan experiments demonstrated that bald eagles would adopt and raise nestlings given to them. Plans are underway to induce other birds that continue to incubate addled eggs well past the normal incubation period to accept nestlings. These operations should assure continuity of a given nesting site once nestlings reach maturity and return to breed, assuming that young bald eagles return to nest at or near places of hatching.

DDT, of course, has not been solely responsible for the decline of the bald eagle. The pesticide dieldrin has caused direct mortality of bald eagles and probably plays a role in embryo mortality similar to that shown for golden eagles. Habitat destruction and shooting have played significant roles as well. Education programs may have reduced shooting, but it continues to be a cause of mortality. The Patuxent Wildlife Research Center at Laurel, Maryland, continues to receive eagles that have died from numerous causes, many of which could have been avoided.

Government agencies, particularly the U.S. Forest Service, which

administers a high percentage of bald eagle nesting habitat, have placed restrictions on activities, including logging, in the vicinity of nesting trees. Some private landowners have followed their example. The National Wildlife Federation, through private donations, has been purchasing land where bald eagles concentrate in winter in the North Central States.

**W**ITH MANY PEOPLE WORKING for eagle preservation and with eagle decline apparently checked, the question must be asked whether the bald eagle should be called an endangered species. To understand this issue, both the bald eagle's taxonomic classification and legislation pertaining to endangered species passed by the Congress must be understood. Even before the turn of the century it was recognized that bald eagles from Alaska averaged 10 to 15 percent larger than bald eagles from Florida. There is no clear breaking point between the smaller birds in the south and larger ones in the north because the size change is gradual. Nonetheless, as allowed by biological classification systems, the southern birds were designated southern bald eagles (*Haliaeetus leucocephalus leucocephalus*) and the northern birds as northern bald eagles (*H. l. alascanus*). The boundary between the two subspecies was vaguely defined but followed approximately the Maryland-Pennsylvania boundary in the East and the Oregon-California line in the West.

The Endangered Species Preservation Act of 1966 called for a formal list of endangered species for the United States. Subspecies were recognized for the list, and the southern bald eagle was listed. The fortieth parallel, for want of a more definitive boundary, was set as the northern edge of the southern bald eagle's range. This boundary actually split a population in northern California. The northern bald eagle did not qualify for the list because of large numbers in Alaska and Canada.

The Endangered Species Act of

1973 changed the criteria for listing and provided for listings within any significant part of an animal's range. This change opens the way for possible listing of the bald eagle south of Canada, or in certain other geographical areas regardless of taxonomic status. The biologically unsound fortieth parallel can now be replaced with a more practical boundary.

The U.S. Fish and Wildlife Service is currently reviewing the bald eagle relative to just such a reclassification under the new Endangered Species Act. It could list some populations as "threatened," a new category under the act that means "likely to become endangered." Certainly the Maine population, which is not currently listed, deserves special consideration. The FWS will be seeking and reviewing scientific data on possible reclassification of the bald eagle throughout its range. Although this discussion considers only federal endangered species actions, some states have endangered species acts that recognize both southern and northern bald eagles under various labels, depending upon the state.

The Bald Eagle Protection Act of 1940 as amended provides federal protection to all eagles against shooting or other types of capture or hunting, but it does not protect habitat. Listing a species or population as "endangered" or "threatened" under the Endangered Species Act provides protection to its habitat from actions funded or authorized by the federal government but not from private actions.

Most experts agree that the bald eagle is relatively secure in Alaska but certainly vulnerable to a reduction in numbers. But is the bald eagle endangered in the forty-eight contiguous states? Or should it be split regionally or by populations with separate classifications according to local situations? Although the experts agree that the status of the bald eagle in the forty-eight states is not so serious as that of the whooping crane, red wolf, or California condor, no two people equate the definitions of "endangered" or "threatened" ex-



actly alike. Classification of the eagle under terms of the new Endangered Species Act could therefore precipitate a debate, but most biologists would probably agree that they would not feel comfortable with fewer bald eagles in the forty-eight states than exist now and that every effort should be made to preserve the components of existing nesting territories and wintering areas. More definitive data are needed on reproductive and mortality rates required to sustain populations. It is hoped that with a further decline in chlorinated hydrocarbon pesticide levels, the bald eagle will return to some areas from which it was extirpated. Although extremely costly, it may be possible to reintroduce bald eagles to areas from which they were extirpated by using falconers' hacking techniques, as now being tried on the peregrine falcon. Such an experiment with bald eagles is in fact being undertaken this year by scientists of Cornell University.

For the time being, the bald eagle

is probably saved, but we must continue conservation efforts. In the same sense that we must expend a never-ending effort to preserve our freedom, so must we maintain a vigil to keep our national bird flying. Perhaps in this way the bald eagle is a most appropriate national symbol. ■

Currently with the Office of Endangered Species, U.S. Fish and Wildlife Service, David B. Marshall serves as a bird specialist and coordinates inter-agency programs for restoring endangered species throughout the country.

Paul R. Nickerson oversaw the U.S. Fish and Wildlife Service's National Bald Eagle Nesting Survey and participated in the Maine eagle transplant experiment. Now he is Endangered Species Program Specialist in the Northeast.

Outdoorsman John E. Swedberg has been photographing wildlife, especially eagles, for more than twenty years. The eagles photographed here are part of a small wintering population in central Massachusetts, where they gathered to feed on a deer killed by dogs.



# NPCA at work

## CONGAREE

### No Place Can Compare

At recent congressional hearings NPCA firmly endorsed timely inclusion of the Congaree Swamp in South Carolina in the National Park System as a national preserve. NPCA noted that there is no comparable ecological community in the Park System to represent this unique, magnificent swamp forest.

Hearings were being held on HR 11891, introduced by Representative Floyd Spence (R-S.C.), which would preserve the 15,000-acre Beidler tract, a largely virgin forest constituting the last remaining significant segment of river bottom hardwood swamp forest in the southeastern United States. NPCA pointed out to the Subcommittee on Parks and Recreation of the House Interior Committee that the need for action on Congaree Swamp is particularly urgent because this privately owned tract is being logged at the rate of about 500 acres per year, and several thousand acres already have been cut.

NPCA also cited a 1963 Park Service study recommending establishment of a 21,000-acre Congaree Swamp National Monument and a more recent 1975 study by the South Carolina Wildlife and Marine Resources Department.

In describing this land of loblolly pine, cypress, water tupelo, oak, hickory, and sweet gum, the state study pointed out that "the tract is unique in that it covers a diverse and well-developed amalgam of old growth forest communities, supporting succeeding large-canopy trees. This significance is underscored by the presence of seventeen state record-sized trees, five of which are national records or nominees, as well as several near-record trees. This is an unusually high concentration of record trees. Such trees are more typically found as isolated specimens in second-growth forests or as open-grown trees in estates and fields. Thus, the tract appears to be the last major remnant of the mature bottomland hardwood ecosystem once common in the Southeast."

In underscoring the need for the preservation of the entire Beidler tract as a core area of a new NPS unit, NPCA again cited the recent South Carolina report, which states that no one portion of the area represents the diversity of canopy size and community types found on the tract.

Despite unanimous endorsement of including the Congaree Swamp in the National Park System by national and local conservation organizations and despite years of favorable studies, the Office of Management and Budget (OMB) apparently ordered the National Park Service to testify at the hearings in favor of deferral of action until more studies are completed. The action by OMB is in keeping with an apparent Administration policy that no new areas costing money should be added to the Park System. All of the Congaree Swamp acreage proposed in the bill in question is owned by the Beidler fam-



CAROL SNOW

ily and would be purchased at fair market value if the swamp were included in the National Park System.

NPCA charged that the Administration's stance of seeking deferral of action on Congaree is ill-founded and unreasonable, pointing out to the committee that a decision to defer action indicates a complete lack of comprehension of the plight of this uniquely valuable resource. NPCA told the committee that "once again, as we seem to see all too often, the OMB has forced itself into the midst of a natural resource decision—an area in which it has no expertise, ability, or understanding." In conclusion, NPCA urged

the committee to ignore the recommendations of the Administration and to approve legislation establishing the Congaree Swamp as a unit of the National Park System. At press time, the House Interior Committee had taken no action and none had been scheduled in the Senate.

## BACK BAY

### Backbone or Backdown?

The Department of the Interior recently proposed to relax restrictions on vehicular access to fragile beach at Back Bay National Wildlife Refuge on the Virginia coast, to the dismay of NPCA and other conservation interests that had helped the Interior Department affirm in court its right to protect refuge wildlife by restricting access.

NPCA is prepared to return to the courts—if necessary—to force the Department to carry out its preservation mandate at the refuge.

On March 26, 1976, Interior proposed regulations that would allow "owners of improved property" to use the refuge beach. For several years a local developer has sought access to recreational properties south of the refuge, and this proposal opens the way for some owners of recreational property to the south of the refuge to cross the beach in four-wheel-drive vehicles, dune buggies, and trucks. The proposal would result in perhaps 100 additional vehicles per day or more through the refuge. Whatever the number, if the proposed relaxation goes into effect, increased numbers of vehicles will be using the refuge as a roadway—disrupting the food chain, killing small beach crustaceans and turtles, and disturbing shorebirds and migratory birds that winter at the refuge.

In comments on the recent proposed regulations, NPCA urged a return to regulations that expired on December 31, 1975, limiting access to permanent year-round residents of the area and service vehicles.

NPCA pointed out that several years ago when the issue of vehicular access through the national wildlife refuge was in the courts being challenged by real estate developers in North Carolina, NPCA and others intervened on behalf of the Interior Department, supporting its right to place such restrictions on access. Interior had clamped

down on hordes of vehicles crossing the beach.

To the delight of conservationists everywhere, in late 1975 an appeals court handed down a strong decision upholding the Department's authority—a decision expected to set a precedent in similar cases of disputed access to national wildlife refuges and national parks.

Now Interior seems to be backing down on its duty. NPCA noted that "with pressure from the developers on the North Carolina Outer Banks sure to continue, and with the possibility that the State of Virginia may seek access through the refuge for [users of] False Cape State Park, the continued viability of Back Bay National Wildlife Refuge as a sanctuary providing critically needed wildlife habitat for endangered turtles, migratory waterfowl, and other [wildlife] seems in jeopardy. Increased vehicular access must be prohibited."

#### INDIANA DUNES

##### Nuclear Neighbor

NPCA has urged the Interior Department to move in the courts for an injunction to halt construction of a nuclear powerplant adjacent to Indiana Dunes National Lakeshore.

NPCA President A. W. Smith noted to Interior Secretary Thomas S. Kleppe that a recent ruling in the Seventh Circuit Court of Appeals against plaintiffs seeking to bar construction of the Bailly Atomic Plant relied heavily on the fact that the Interior Department had not sought to protect the National Park System unit by legal action.

Smith added that "in our judgment the necessary protection of Indiana Dunes National Lakeshore against the great dangers which construction and operation of the plant would pose to the people using the lakeshore and the federal property therein" requires such legal action.

Indiana Dunes National Lakeshore stretches some eleven miles along the south shore of Lake Michigan east of the proposed nuclear reactor site. Thousands of people use the national lakeshore each summer day, so the consequences of a nuclear accident would be tremendous. Furthermore, in routine operations the powerplant would permanently damage fragile wetland ecosystems by lowering the

water level of bogs and ponds; would emit acid mist over the white sand beaches and dunes of the lakeshore; would pollute Lake Michigan with waste materials; and would destroy fish and threaten other flora and fauna.

The Justice Department currently is handling the case for the defendant Nuclear Regulatory Commission, and probably would handle any case initiated by Interior. Nevertheless, it is the responsibility of the Interior Department to act.

NPCA observed that "the only alternative available to persons concerned with the public interest in a matter of



this kind, aside from calling upon you for action as we now do, would be to bring an action in court to compel the Department to do so. We trust that such a course will prove to be unnecessary. . . ."

#### ROCKY MOUNTAIN

##### Tomorrow's Showcase Park?

After two years of efforts by the Park Service, the final master plan for Colorado's Rocky Mountain National Park recently was approved by NPS national headquarters.

NPCA contacted park superintendent Roger Contor to congratulate the Park Service on a good job in assembling this guide for long-range management of the park and to express our support of a number of conclusions in the master plan, but at the same time NPCA made it clear that our policy differs from the master plan in certain aspects—notably in NPCA advocacy of eliminating ski facilities at Hidden Valley.

NPCA expressed strong support for the Park Service's proposed transportation systems along Fall River-Trail Ridge Roads and Beaver

Meadow-Bear Lake Roads. These two mass transit systems for park visitors were the subject of a recent National Park Service study conducted separately from the master plan process, though considered in it.

NPCA noted that this is a period in which park visitation is increasing by leaps and bounds; thus, the only way in which the park's resources can be both fully preserved and made available to greater numbers of visitors is by elimination or severe reduction in the use of private automobiles inside the park coupled with the introduction of a convenient and comfortable visitor transportation system.

In addition to the routes contemplated by the Park Service, NPCA urged extension of visitor transportation routes to cover the entire Trail Ridge Road between the east and west entrance stations.

Use of such a complete system could be voluntary at first; but if park visitation increases dramatically, the situation might necessitate mandatory use of public transit for park visitors entering and exiting through the same entrance station.

NPCA told Superintendent Contor that our greatest disappointment in the master plan is its apparent decision to allow the Hidden Valley Ski area to remain inside the park. The master plan states that the Hidden Valley facilities "should continue in operation until alternative facilities become available." Expressing strong opposition to this decision, NPCA stated that it is unlikely that alternative facilities will be developed outside the park to serve downhill skiers as long as the existing facilities remain in Hidden Valley. Downhill ski facilities in Hidden Valley should be eliminated now, thus stimulating local business interests outside the park to develop similar facilities.

In other matters revealed in the master plan, NPCA expressed opposition to use of snowmobiles in the park, condoned in the master plan. Because, as the master plan indicates, the area surrounding the concession-owned Trail Ridge Store is overdeveloped, NPCA urged that at least a portion of store facilities (such as souvenir sales) be eliminated immediately, particularly in consideration of the fact that similar facilities exist outside the park.

NPCA strongly endorsed the master plan's recommendation that facilities in the Moraine Park, Hallowell Park, Tuxedo Park, and Green Mountain areas—all within Rocky Mountain National Park—be removed.

In conclusion, NPCA stated that despite differences between certain aspects of the plan and our policies, this Association believes that the management of Rocky Mountain park contemplated in the final master plan will provide for sound resource management and, with the changes we have recommended, could make Rocky Mountain the showcase park of the National Park System.

#### NEW RIVER

### "Worth Fighting For"

On several fronts, the battle to preserve the New River has intensified. The House and Senate Interior committees recently held hearings to consider legislation that would designate part of the New River in North Carolina as a component of the National Wild and Scenic Rivers System and to invalidate at least that portion of a Federal Power Commission (FPC) license for dam construction that would allow flooding of the New in North Carolina.

The Interior Department is prepared to back up its decision about wild and scenic river designation by going to court. On March 13, 1976, Secretary of the Interior Thomas Kleppe designated 26.5 miles of the New River in North Carolina as a state-managed component of the National Wild and Scenic River System. However, on March 24 a U.S. District Court ruled that a dam construction permit issued by the FPC to the Appalachian Power Company (a subsidiary of American Electric Power systems) for the construction of two pumped-storage dams (the Blue Ridge Project) would remain valid and take precedence over the wild and scenic river designation.

Secretary Kleppe subsequently announced that he believes the March 24 decision was wrong and that his department would seek to assist North Carolina as a "Friend of the Court" in appealing the decision to the Supreme Court. At an April 14 ceremony in which he formally signed papers concerning the wild and scenic river designation in the presence of the governor of North Carolina and others,



FISH & WILDLIFE SERVICE

*A portrait of the bald eagle by Bob Hines has been offered for sale to the public by the U.S. Fish and Wildlife Service. This color reproduction (8½×11 in. on a mat 11½×15 in.) of an oil painting is accompanied by text describing the eagle's historic symbolism as well as its present day plight in the wild. The "Symbol of Our Nation" is available for \$1.85 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock Number 024-010-00408-8.*

Kleppe noted that "the New River is worth fighting for. I salute those of you who have carried the battle to this point. We seek to help you in going the rest of the way."

Many people feel strongly about this issue because construction of the dams, for which Appalachian Power has been seeking permission for more than ten years, would inundate forty thousand acres of farmland and rolling wooded hillsides in both Virginia and North Carolina and, in particular, would flood the 26.5 miles of river designated a "scenic" component of the Wild and Scenic River System.

Some congressmen were unwilling to leave the fate of the river to the courts. Upon invitation, NPCA testified in both the House and the Senate in favor of bills to protect the river by invalidating the FPC license and including the river in the Wild and Scenic River System. NPCA stated that "this river's great beauty and significance to the nation stems from a combination of utter wildness along many stretches, peaceful pastoral settings of farms which have been passed from father to son for generations, and small

communities near the banks of the river where everyone knows his or her neighbors. This unique combination is endangered and must be preserved as it is, not only because this region has national significance, but more importantly because we must show as a nation that we care about individuals and recognize the importance of the continuance of long established communities and rural lifestyles." NPCA pointed out to the committee that construction of the Blue Ridge project would uproot more than three thousand people from their homes.

Within two days after the hearings, the House Parks and Recreation Subcommittee approved the bill with virtually no opposition and sent it on to the full House Interior Committee. At this writing, the Senate Interior Committee has not acted.

#### POTOMAC RIVER

### Preservation & Recreation

National Parks & Conservation Association has long been a leader in citizens' efforts to protect the Potomac River. In the 1960s NPCA fought the Army Corps of Engineers proposals for the construction of sixteen major dams on the Potomac. To date only one of those dams has been constructed, and it is doubtful whether the other dams will be built.

In keeping with this special interest in the preservation of the Potomac River, in invited comments NPCA recently supported a proposed bill—S 2561—now being considered by the Senate Subcommittee on Parks and Recreation that would establish along the banks of the Potomac River through West Virginia, Maryland, and Virginia a narrow green sheath that would protect the Potomac and its shoreline from intrusion by incompatible development. This buffer zone would be narrow enough so that social and economic disruption along the river would not occur. Adjacent farmlands would not be disrupted, and no new access corridors are provided.

The *National Forest Guide* just published by Rand McNally describes attributes and recreational facilities of national forests all over the nation. At \$4.95 the book is a bargain for planning vacation trips.



In supporting S 2561 NPCA also urged inclusion in the bill of a provision for study of the Potomac River Estuary through the District of Columbia to the river's mouth in the Chesapeake Bay. NPCA believes that the lower portion of the Potomac deserves recognition because of its great historical significance and the wide range of recreational opportunities this segment of the Potomac offers. Although this portion of the river suffers from severe pollution, protection under this bill would be a major step toward clean-up and protection of the entire Potomac River.

NPCA also stated that it would accept the proposal to include the C&O Canal National Historic Park within the boundaries of the Potomac River Historical Area that would be established under S 2561, but that the Association would strenuously oppose the dissolution of the C&O Canal park as a separate unit of the National Park System in light of the area's national and historic significance.

#### MOUNT RAINIER

**Threat to Cougar Lakes Area**  
NPCA is concerned about a U.S. Bureau of Reclamation proposal to enlarge a reservoir less than 10 miles from Washington's Mount Rainier National Park and close to the proposed Cougar Lakes Wilderness Area.

The Bureau and the U.S. Fish and Wildlife Service are conducting a joint study of a proposal to enlarge the Bumping Lake Reservoir from 33,700 acre-feet to 458,000 acre-feet. Expansion of the reservoir could have significant adverse effects on the environment of the proposed wilderness area.

The enlargement proposal is officially based on a wish to enhance salmon habitat; however, there are other reasons for development that could have adverse impacts upon the surrounding area. An initial proposal advanced in 1968 was based on a need for irrigation water in low-water years and for flood control. That plan was rejected when citizen protest and supplemental information indicated that the cost/benefit-ratio of the project was not favorable to enlargement.

It can be anticipated that the enlarged reservoir would be likely to attract increased recreational use such as motorboating, higher density campsite

use, and more sport fishing. Such increased use would not be compatible with the wilderness qualities of the surrounding areas.

Finally, there is some question as to whether the salmon habitat could be adequately restored. Downstream structures and water pollution from irrigation discharge possibly could nullify the effects of the project.

The draft environmental impact statement on the project is due to be published this month. NPCA members who wish to comment on the proposal should get copies of the DEIS from:

Bureau of Reclamation  
Department of the Interior  
Washington, D.C. 20240

#### GRAND CANYON

##### Colorado River Travel

NPCA believes that wilderness designation and elimination of motor-powered craft on the Colorado River through Grand Canyon National Park probably would reduce the number of people using the river, thus easing the burden on the river environment.

NPCA Southwest representative Robert Coshland recently presented a

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Normally priced at \$14, this book is now available to NPCA members for only \$11 postpaid.

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#### ASIA

INDONESIA: 24 days, July, Sept. & Jan. • MALAYSIA: 27 days, July, Oct. & Jan. • NEPAL TREK: 23 days, Oct. & Mar. • SOUTHERN INDIA & SRI LANKA: 23 days, July, Oct., Nov., Jan. & Feb. • NORTHERN INDIA & NEPAL: 36 days, Nov. & Jan. • KASHMIR WITH LADAKH: 22 days, July, Aug. & Sept.

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## Memo to Members

Dear Friends,

Producing the magazine for you every month is wonderfully challenging, exciting, fascinating, and fun. Our staff is very small, but all of us pitch in on all aspects of magazine production to get the job done. Joan Moody, assistant editor, who helps me plan the magazine and researches, writes, and rewrites our news section as well as some articles, identified and pursued many of the crucial issues we have dealt with in the past year. Nancy Schaefer, production assistant, efficiently and tactfully handles correspondence, phone calls, and a myriad of administrative details that keep us organized and on schedule. Kathy Rushing, who once worked full-time as assistant editor, now works only part-time, skillfully evaluating and editing manuscripts. I meddle in *everything*.

We hope the recent articles on lesser used parks, safety precautions, and travel tips have helped you plan an enjoyable vacation this summer. We also hope that the many articles on national parks we have published over the years have piqued your interest enough to visit these areas.

During the past couple of years, it sometimes seems that we have been publishing more about threats to the parks than about their magnificent attributes. We have been asking you to write letters to government agencies about these threats, and many of you have responded admirably. But some of you complain that you don't want to read bad news and want more appreciation articles.

We do, too, and we wish there were no threats to tell you about. But threats to the National Park System do exist and seem to be increasing—mining, grazing, oil and gas leases, coal-fired powerplants, insufficient personnel and budget, continued exploitation of authorized new areas. If the American public relaxes its vigilance, we could lose the priceless natural heritage that the National Park System is supposed to protect. Then we wouldn't have any pristine areas for me to publish appreciation articles about. So I'll just have



to keep telling you the bad news along with the good in the hope you'll become angry enough to work to protect the parks.

Similarly, for many years we have been publishing monthly articles on endangered species of plants and animals, and we tell you how you can help save them. NPCA has taken the lead among conservationists in urging the preservation of endangered species of plants; and we have been keeping you informed about provisions of the Endangered Species Act of 1973 and the Smithsonian Institution's report on endangered, threatened, and extinct plants—and urging you to help.

I hope you are enjoying the monthly series of Bicentennial articles this year. Our plan is to trace the history of this country as represented by units of the Park System. In planning this project, I felt that we had to begin *before* the American Revolution, because the seeds of our national character were sown long before then—starting with the earliest exploration and settlement of this vast continent. These essays are being written alternately by two talented historians on our editorial staff—Nancy Schaefer and Kathy Rushing—with an occasional piece excerpted or adapted, as this month, from National Park Service publications.

We often receive letters from members and other readers requesting the

use of more color in our magazine. I would like to use more color, too. The problem is that color is vastly more expensive to reproduce than black and white is, and NPCA just can't afford color right now.

Of course, if we had a lot more money, perhaps we could afford color in the magazine as well as to enhance our conservation activities. One way we could achieve more income is by having more members.

That's where you come in. We are cutting back on our promotional mailings this year and are asking our members to help obtain new members from among their acquaintances. In fact, we think we can save so much money on mailings that we can give you a premium for enlisting a new member and your friend a premium for joining! If you give a gift membership, only *you* get the premium, because your friend receives the magazine as a gift.

The premium is a portfolio of nine stunning photographs from covers of the magazine—four color and five black and white. These photos are the work of some of the best nature photographers in the world, and they include a white border suitable for matting and framing.

If you enlist a second and third new member, you will receive three more prints—two black and white, and one color—for *each* new member enlisted to add to your portfolio. More than three new members will bring you special recognition from NPCA.

In addition, during the Bicentennial Month we are making a very special offer. If you enlist a new member or give a gift membership *during July*, a print of the beautiful painting of bald eagles that graces our cover this month will be added to your portfolio.

So come on! Use the enclosed envelope to enlist a new member or give a gift membership. Let's double our membership *this month*! You and your friends will enjoy the beautiful prints you will receive, as well as the exciting and informative issues of the magazine we are planning for you in the coming months.

Best wishes,  
Eugenia Horstman Connally  
Editor

statement to a Park Service workshop in Arizona on the use of the Colorado River through the national park. NPCA pointed out that the management plan being developed for the river should address itself primarily to three aspects of river use: wilderness impacts, carrying capacity, and visitor interpretation.

At present, the number of outfitters operating as concessioners control 92 percent of visitor use, largely on motorized rafts. NPCA urged provision in the management plan for *elimination* of motor-powered travel on the river, citing the ever-increasing intrusion of these crafts on the wilderness character of the river—not only on its main stem but in side canyons and along tributary streams as well, where the noise of high-powered motors cannot be excluded.

Elimination of motorized river travel would have beneficial impacts on the quality and volume of river use as well. Promoting slow float trips in small parties manning unpowered dories and rafts could provide visitors with a much more desirable experience, an experience compatible with the existing wilderness environment. This would greatly lessen the noise, water and air pollution, and litter that generally result from the present overuse of the river.

In relation to visitor interpretation, NPCA pointed out that although there generally is little need for additional development for visitor interpretation outside of existing developed areas, there may be specialized visitor needs such as research in remote park areas. These needs could require river access and should be permitted.

## WHALES

### Call for Embargo

NPCA supports the use of economic sanctions against certain nations that continue to exploit the already drastically reduced populations of a number of species of whales, and continues to advocate a worldwide moratorium on whale killing.

As many NPCA members know, overhunting has seriously depleted whale populations to the extent that the blue whale is on the brink of extinction and eight other species of great whales have been placed on the endangered species list. Survival of some of

the other species—especially sperm, fin, and minke whales—is also in serious doubt.

Nevertheless, many countries continue to slaughter the whales. Whale products are used as food in Japan, as oil for space ships in the Soviet Union, and in cosmetics and other products in many parts of the world—even though there are reasonable alternatives to every use. For instance, whale meat supplies only about 1 percent of the protein consumption of the Japanese population, and other oils can be used in the manufacture of lipstick.

The International Whaling Commission (IWC), a consortium of representatives from fifteen past and present whaling nations, has been ineffective in regulating whaling. At first Japan and the U.S.S.R. (both IWC members) refused to agree to limit whaling. Later, they agreed to accept quotas on the number of whales member countries could kill. These quotas ignore scientific evidence and international appeals for curbing whaling. In fact, quotas have been so high that whalers have not been able to find enough animals to meet their quotas.

Meanwhile, other countries, not members of the IWC, continue to hunt without *any* restraints whatsoever. Peru, Chile, and others kill many whales, including members of endangered species—even blue whales—immature whales, and lactating females. Some Japanese companies have transferred jurisdiction of some of their ships and are now sailing them under the flags of non-IWC nations. Those catches are not counted against the quotas assigned to Japan and are not included in IWC estimates of yearly whale killings.

In an effort to deal with this problem, Representative Alphonzo Bell (R-Calif.) has introduced legislation in the form of H.J. Res. 923, placing an embargo on the products of any non-IWC countries or companies that engage in whaling. The embargo would extend to "parent" companies, so it would include some of the Japanese firms whose ships are sailing under other flags. A direct embargo of Japanese products is prohibited under international agreement.

NPCA recently testified at the invitation of the House Merchant Marine and Fisheries Subcommittee on Fish-



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eries concerning Representative Bell's resolution, urging swift approval by Congress.

NPCA testimony noted other actions that could further whale preservation. At the urging of NPCA President A. W. Smith, who serves as an individual as a member of the U.S. delegation to the UN Conference on the Law of the Sea, an article on preservation of marine mammals including whales has become part of the single negotiating text at the conference and stands an excellent chance of adoption.

The Administration, NPCA pointed out, has not enforced the Pelly Amendment to the Fisherman's Protective Act of 1967, which allows the United States to bring economic pressure against nations not practicing good fisheries (or whale) management. Thus, an excellent tool is not being used.

For many years NPCA has advocated the establishment of a ten-year moratorium on the killing of whales to allow whale populations to increase. (The U.S. government has supported a moratorium, but at the June 1975 IWC

meeting, in the face of an almost total lack of support among other member nations, it compromised in favor of quotas.)

The IWC held its annual meeting again in June 1976. (Watch for future reports.)

NPCA observed, however, that immediate and certain action to help the whales can come only from prompt passage of H.J. Res. 923, legislation "imperative to the continuing existence of the great whales."

#### BIG THICKET

#### Whither the "Big Woods"?

The National Park Service has quietly begun the planning process for a master plan for management of Big Thicket National Preserve in Texas even while public attention focuses on battles seeking funding for the Service to acquire land in this relatively new NPS unit—and thus enable it to control extensive logging currently threatening the "Biological Crossroads of North America."

In April NPS issued its first environmental workbook for the preserve—

setting out alternatives for interpretation, development, and use—and held four public meetings in Texas to gather local sentiment regarding the future of the Big Thicket.

NPCA recently provided Big Thicket National Preserve Superintendent Tom Lubbert with a detailed analysis of the workbook expressing NPCA's recommendations for development and use of the preserve.

As NPCA pointed out, this national preserve was established in 1974 primarily to protect outstanding biological values found nowhere else in the United States.

NPCA stated that it is essential that the unique associations of plants and animals as well as the diversity of species found in the Thicket be maintained, emphasizing that "no alternatives for the future development and use of the Big Thicket may be selected which in any way would harm or render less significant the unique values preserved in this new unit of the National Park System."

In addition to offering specific comments on trails, roads, and methods of access to each of the twelve units of the preserve, NPCA comments reflect our stand on the type of protection and management that the Big Thicket deserves. Each of the twelve units (once fully acquired) would be separated by large expanses of non-park lands. NPCA said that although we recognize the need for some minimal development in order to provide visitor access to and understanding of the area, the degree of access should vary from one unit to another—even when fully developed. In addition, although access should be provided to each unit, it should not be provided to every portion of each unit. NPCA recommended against paving existing unpaved roads within the Big Thicket preserve and stated that scenic highway designation is not called for. Sufficient roads already surround and cross each unit of the preserve. Where standard public access facilities are provided, they should be located at or near points where existing through roads abut or cross the units of the preserve.

Regarding the types of visitor uses of this "national preserve" (a new kind of NPS unit)—including hiking, horseback riding, camping, fishing, off-road vehicle (ORV) use, boating, hunting,



NATIONAL PARK SERVICE

*The lands authorized for inclusion in Big Thicket National Preserve, Texas, which for the most part still must be acquired, are the remains of what Indians called the "Big Woods." A treasureland of biological diversity, the Big Thicket is a transition area between moist eastern woodlands, the arid Southwest, the tropical coastal marsh, and the central prairie. It is a land of both orchids and cacti and of world-record-size trees covered with Spanish moss, a place where alligators and roadrunners both find refuge, and also where the whine of chainsaws sometimes drowns out the calls of the pileated woodpecker, the chickadee, and other of the Thicket's countless species of birds.*

and trapping—NPCA stressed that all these activities must be carefully regulated by the National Park Service. Restrictions should include designating trails for hikers and horseback riders; designating sites for camping; setting specific location, times, and methods of hunting, fishing, and trapping; a general prohibition on ORV use except on designated routes; and recognition of the role that wildfire plays in natural ecosystems.

Before concluding our presentation to the Park Service, however, NPCA pointed out that extensive research must be conducted in each of the twelve units of the preserve in order to assess existing conditions more fully. At present not enough information is available to determine exactly how fragile certain resources are or to establish for each unit maximum visitor-carrying capacity, thus ensuring zero impairment of the Big Thicket's natural assets.

Meanwhile, in a recent hearing before the Senate Subcommittee on Parks and Recreation, the Interior Department informed the subcommittee that the Park Service would move quickly to acquire the most threatened lands in the Big Thicket through a "declaration in taking" if Congress would approve an emergency appropriation of \$3.8 million for this purpose. Assistant Secretary of the Interior Nathaniel Reed notes that the logging activity in the Big Thicket results from financial motivations or attempts to control serious infestations of southern pine bark beetles, and that some timber companies have used the "cut and salvage" method to attain economic return. Secretary Reed has assured NPCA that if it becomes necessary to control the beetles when these lands are acquired by the Park Service, this method will not be used. Secretary Reed emphasizes that NPS is working to try to keep undesirable operations to a minimum until it can acquire the lands, which were designated for inclusion in the National Park System when the national preserve was established in 1974. After preliminary work such as title searches, surveying, mapping, and appraisals on a tract-by-tract basis, the government has begun to obtain options and make purchases.

However, NPCA believes that the situation is urgent in several areas of

this unique biological treasure and in invited testimony urged increased funding for land acquisition in the Big Thicket in the fiscal year 1977 appropriations.

## ORGAN PIPE Depredations Continue

At a recent public hearing in Arizona, NPCA urged the Park Service to protect Organ Pipe Cactus National Monument—an NPS unit rich in desert fauna and flora (most notably the rare organ pipe cactus)—from cattle grazing, feral burro depredation, and mining, and supported relocation of certain facilities.

NPCA Southwest representative Robert Coshland testified at the hearing on the environmental assessment for the master plan of Organ Pipe Cactus National Monument and on the proposed development concept plan for the Lukeville section.

NPCA urged the Park Service to continue its efforts to eliminate grazing from the monument, which lies along the U.S.-Mexican border 120 miles west of Tucson, Arizona. Even though all grazing permits were terminated in 1968, more than 1,000 head of cattle are still illegally being grazed in the monument by a family of ranchers who held permits for grazing cattle on monument lands from 1937 to 1968.

Meanwhile, the Park Service has filed depositions seeking a judicial order requiring the ranchers to withdraw their livestock while at the same time the ranchers have filed a responding deposition. The case has yet to come to trial.

NPCA also criticized the lack of attention in the master plan to the problem of grazing by feral burros in this area of important botanical resources, and urged the Park Service to include a program in the master plan for the complete elimination of feral burros within the monument by humane methods.

Legislation is pending before the Congress to close this monument to mining and mineral entry and to more closely regulate the mining on more than 30,000 acres of claims. In the meantime, NPCA urged the Park Service to regulate these activities as stringently as possible under existing law.



## NATIONAL PARKS SAMPLER

### Washington Birthplace

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**GETTING IN:** Free

**WHERE TO STAY:** Meals and lodging in Montross or Fredericksburg. Camping at Westmoreland State Park—reservations through Virginia Parks Reservations, Box 3181, Norfolk 23510.

**WHAT TO DO:** Discover colonial living farm and historic areas, new visitor's center, museum. Walking trails and picnic areas. Beach hikes.

**MORE TIPS:** Superintendent, George Washington Birthplace National Monument, Washington's Birthplace, Va. 22575.

George Washington Birthplace National Monument on Pope's Creek, known as Wakefield, marks the ancestral plantation where Washington was born in 1732 and spent his first 3½ years. From subsequent boyhood stays, he could recall vegetables growing in the garden; flowers blooming near the house; and fields of tobacco, corn, and wheat. Today the monument is a living farm designed to help you imagine his childhood. Visit the birthplace site and a memorial house constructed to illustrate the lifestyle of eighteenth century planter aristocracy in Tidewater Virginia or a colonial herb garden including more than 170 herbs. From the kitchen house come the aromas of herbs drying to make seasonings, sachets, and medicines and of bread baking. In the meadows graze sheep of a breed true to the eighteenth century, and horses are being backbred to that era. You can visit the burying ground of Washington's ancestors and a museum housing archaeological finds. A walk through the cedar grove on Burnt House Point (near original house site) affords excellent views of Pope's Creek and waterfowl. Imagine the activity at the wharf and small boys waiting for ships from England . . .

Finally, NPCA strongly supported the relocation of Park Service housing and Service operations and visitor accommodations to the Lukeville area, which is already heavily developed and is on the periphery of the park.

#### WILDLIFE NOTES

### Dolphins, Snail Darters . . .

NPCA and other environmental groups, represented by the Environmental Defense Fund, won a major battle when a federal district judge recently banned commercial fishermen from killing **dolphins** when netting tuna, a practice estimated to have killed more than 100,000 dolphins last year. However, there is a movement in Congress to overturn the decision. . . . The U.S. Fish & Wildlife Service (FWS), supported by NPCA and many others, recently designated **critical habitat** under the Endangered Species Act for the **snail darter**, a tiny perch-like fish known to exist only in a 17-mile stretch of the Little Tennessee River in Tennessee, where it feeds on snails abundant in the shoals. A huge \$100-million dam being constructed with federal funds by the Tennessee Valley Authority threatens to inundate this stretch of the river. After the critical habitat designation—the first permanent such designation for any species—a federal judge rejected a plea by

three environmentalists to issue an injunction to halt work on the dam, noting that the dam is near completion. Determination of critical habitat means that any federal agency that authorizes, funds, or carries out an action that could result in the modification or destruction of habitat of an endangered species must take whatever steps are necessary to avoid such modification or destruction. The judge had said the dam would preclude reproduction by the fish. The dam obviously would violate the Act and environmentalists may appeal the ruling. In earlier comments on proposed critical habitat for the snail darter and five other species, NPCA noted that FWS should reject a proposal by TVA to relocate the snail darters considering that insufficient information is available on the requirements of this fish because it is a recently discovered species. . . . FWS has listed the **gray bat**, a resident of caves in the southeastern and central United States and the **Mexican timber wolf**, which might still occur in the Southwest, as endangered species and declared the **Schaus' swallowtail** and **Bahama swallowtail** butterflies as threatened species—the first insects to be listed by the Fish & Wildlife Service. NPCA urged protection of these butterflies in our July 1974 and September 1975 issues.

## news notes

#### RESERVE MINING CO.

### Fined at Last

On May 4, 1976, Reserve Mining Company and parent firms were charged fines totaling more than \$1 million for polluting Lake Superior in violation of Minnesota permits.

The state of Minnesota has been seeking fines totaling more than \$41 million from Reserve; nevertheless, the recent fine is one of two or three of the largest fines ever assessed in a water pollution case.

Each day the Reserve iron ore processing complex at Silver Bay dumps some 67,000 tons of taconite tailings into the lake upstream from where Duluth and other communities draw their water supplies. Environmentalists and the state and federal governments have been fighting Re-

serve in the courts since 1972, noting that the asbestos fibers such as those Reserve discharges into the air and water endanger public health because they have been linked to cancers.

In addition to \$837,500 in water discharge permit violations, U.S. District Judge Edward J. Devitt fined Reserve \$200,000 for violating court orders concerning discovery of background information and \$22,920 to reimburse Duluth for interim clean water supplies.

In conjunction with state hearings on a site for on-land disposal of the tailings now dumped into the lake, a hearing officer recently recommended the "Midway" site at the terminus of the Cloquet River as the most feasible and prudent site, rejecting the milepost 7 site preferred by Reserve because it would result in three to four times more air pollution. (See April 1976 News Notes.)

## reader comment

### Glen Canyon Permit Request

This letter is in response to a reference to Glen Canyon National Recreation Area which occurred in the April 1976 edition of your magazine. On pages 24 and 26 of that edition is a story alleging threatened significant adverse impacts originating from National Park Service



MIKE PETERS, DAYTON DAILY NEWS

projects. It is stated that Glen Canyon National Recreation Area issued a special use permit for a water line from inside the recreation area to a mine site outside. It is further stated that this was done without public notice or an environmental impact statement. We wish to protest this gross misstatement and will now relate to you the facts of the matter.

The National Park Service received a request for a special use permit for the subject water line in 1974. An environmental assessment was prepared and notice of the availability was sent to major newspapers in the region for publication. After a thirty-day waiting period, we had not received any comments and wrote to selected interested individuals inquiring as to their thoughts on the matter. It was only when we learned from them that they had not seen the notice that we were able to verify that the press release had not been published in either Salt Lake City, Phoenix, or Tucson newspapers. We are at a loss to explain this event. However, copies of the assessment were then made available to our general mailing list to whom environmental documents are sent for review and, following an extended waiting period, their comments were received and analyzed. As a direct result of the comments received from the public, the decision was made *not* to issue the special use permit authorizing the water line. That is where the matter



stands at this time. The original permit applicant has since dismantled his mining operation at Colt Mesa and moved it to a location on property in another state due to the lack of available water necessary to proceed economically with his operation at the Colt Mesa location.

A careless statement such as you have made, appearing in a national magazine of the stature yours has, seriously reflects upon our ability to maintain a credulous public. We would therefore request that in a forthcoming issue, a retraction and apology be extended to Glen Canyon NRA. Further, should we receive adverse comments from your readers we will refer them to you for an explanation.

Temple A. Reynolds

Superintendent, Glen Canyon NRA

*The press release referred to stated that "the National Park Service will proceed with the issuance of a Special Use Permit 30 days following the publication of this notice." This statement implies an intention to issue the permit regardless of public opposition. In fact, the initiation of a lawsuit was apparently required to get the Park Service to withhold the permit issuance. Nevertheless, we regret reporting that the permit was issued. Our mistake.*

## conservation docket

### Action

**Mining in Parks:** S 2371—This bill to restrict mining in national parks moved rapidly through the Senate, but House action has been much slower. The bill would repeal existing laws permitting mining in six units of the National Park System. In addition, it would give the Secretary of Interior authority to impose a four-year moratorium on further mining in Death Valley National Monument, Organ Pipe Cactus National Monument, and Mount McKinley National Park and to regulate mining within the National Park System. House amendments include a provision to permit continued surface disturbance within a claim so a company could continue to maintain its current level of production. The House Subcommittee on Parks and Recreation reported the bill to the full House Interior Committee in late February, after conducting full hearings featuring government, public, and industry witnesses. However, some members of the full committee, led by Rep. Jim Santini (R-Nev.), felt that more information was needed and succeeded in postponing action by the full

committee. Primary advocates of the bill in the House are Rep. John Seiberling (D-Ohio) and Rep. Roy Taylor (D-N.C.). Rep. Don Young (R-Alaska) is the leader of those who wish to see Glacier Bay National Monument removed from the bill. At press time, action was expected in early summer, despite attempts to block the bill.

**Land and Water Conservation Fund:** S 327 and HR 2763—The House-passed bill provides for increased funds for the acquisition and development of land and water resources for outdoor recreation. In addition it would provide money for preserving historic landmarks and purchasing historic structures. Receipts from outer continental shelf leasing would be used for the increased funding levels. There are significant differences between the House bill and the Senate bill that passed last fall. The House bill provides for gradually increasing funding, reaching \$800 million in 1980 through 1989, whereas the Senate bill would increase the LWCF to \$1 billion immediately. The Senate bill would permit the states to use 25 percent of their money for providing shelters for recreation activities, but the House bill has no such provision. The Senate bill would authorize \$150 million for the Historic Preservation Fund, and the House bill would set up a gradually increasing fund that would reach \$100 million in 1980-1989. There will be a House-Senate conference to reach a compromise. The Administration has opposed any increase in the fund.

**Forestry:** S 3091—After joint hearings of the Senate Interior and Commerce committees on S 3091, introduced by Sen. Hubert Humphrey (D-Minn.), the Commerce Committee reported the bill to the Senate floor. The bill included a number of changes, most of which were originally incorporated into S 2926, introduced by Sen. Jennings Randolph (D-W.Va.). Compared to the original bill, S 3091 as amended sets more specific goals and standards for Forest Service management practices. After Senate action, the House is expected to continue work on the bills. For more detailed information, see Conservation Docket, May 1976.

**Valley Forge:** S 1776—The Senate Interior and Insular Affairs Committee has reported a bill to designate the

### A CITIZEN'S VOICE IN GOVERNMENT

Organizations like the National Parks and Conservation Association, which enjoy special privileges of tax exemption, may not advocate or oppose legislation to any substantial extent.

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The best source of information for such purposes is the official CONGRESSIONAL DIRECTORY, which can be bought through the Government Printing Office, Washington, D.C. 20402. It tells you who your senators and congressmen are and lists the membership of the various congressional committees. It also gives full information on the personnel of the various executive bureaus of the government whom one may contact about administrative programs and policies.

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Valley Forge State Park in Pennsylvania as a national historic park. The bill as reported would enlarge the park by the addition of 2,800 acres of in-holdings, but would not include the 865-acre Chesterbrook area, which is now slated for residential development. Senate passage is expected, and House action should follow.

#### New Bills

The following bills have recently been introduced and should be of interest to NPCA members. Descriptions of the bills are followed by the names of the authors and the committees to which they were referred.

**Obed River:** HR 13067—Would designate the Obed River in Tennessee as

a wild and scenic river. It would authorize \$4.6 million for acquisition of land along the river, which would be placed in the recreational river category under the act. Rep. Marilyn L. Lloyd (D-Tenn.). House Interior.

**Indiana Dunes:** S 3329—Would expand the Indiana Dunes National Lakeshore by 4,700 acres. The bill includes 141 acres along the Little Calumet River, 24 acres within Ogden Dunes, and other areas that were dropped from the House-passed bill, HR 11455. Sen. Birch Bayh (D-Ind.). Senate Interior.

**Concessions:** NPCA expects a bill to be introduced soon to amend the Concessions Policy Act, which guides the

concessions policy of the Park Service, by eliminating the preferential rights given to concessions in renewing contracts. The bill is intended to encourage more competition. It would also change "possessory interest" policy to enable the government to buy concessioner-owned or improved buildings at the original building cost less depreciation, rather than at current building cost less depreciation as is now the practice. It would increase the participation of the public in policy- and regulation-making procedures affecting concessions. Small business would be enabled to compete more effectively. Rep. Jack Brooks (D-Tex.). House Interior and Small Business.

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The Teton Science School does not discriminate in any of its policies on the basis of race, sex, or creed. For further information and enrollment write: Director, Teton Science School, Box 68, Kelly, WY 83011.

*Continued from page 2*

power, produced from coal, from oil, and now from nuclear fuels, traps us in needs we never knew before: the gadgets we could easily do without, the buildings sealed from light and air, dependent on distant power plants.

This Bicentennial summer now we celebrate in restless journeys along mighty roads, perhaps on one last binge before the oil gives out. At least we did cut down the death rate some, could cut it more with lower speeds.

**R**ELENTLESSLY we build ourselves into the nuclear trap. The deadly domes arise on margins of our cities everywhere. And poisons fit to strip us flesh from bone accumulate in tanks for disposition—where?

The warm sun shines, the winds blow free, the tides continue in their rhythmic rise and fall. The coal is there, the dwindling oil, to take us through until the time when these benevolent forces may be reined. Can we the people turn this evil back, this nuclear genie run so far amuck?

How best to use our land? Can we confine our cities, halt the urban sprawl? Can we retain our farmlands, forests, countryside, and wilderness? Now in this very Bicentennial year, the speculators crawl across our world, greed breaks our efforts to protect the very earth that shelters us. Can we now turn to rational land-use planning, motivated to preserve, restore, a natural setting for our lives?

**T**HAT EARLY REVOLUTION that we praise: that mutiny, that treason, if you will, that founded the Republic: it set the pace for others everywhere, the holocaust in France, tides of rebellion in the Latin lands.

We fed and stirred those fires. We thought we had a call to spread republican government around the world. The first World War, so we the people thought, was fought for safety of democracy.

The second time, we lurched against a monstrous evil in the Swastika. Surely, there was no choice. The stench of the death camps lingers. Farther east, Lubyanka's dungeons hold their prisoners yet.

Most deeply shaken, we have just withdrawn from our false mission in those distant Asian lands.

Yet mission nonetheless remains. To build a peace, to help spread liberty, and—dare we say it?—to banish disease, illiteracy, poverty, around the globe. Two hundred years from now let our descendants judge how we and others who came after us fulfilled this charge.

**S**TARVATION AND PROLIFERATION run a deadly race within the nations which once had rising expectations. Under the surface of the broiling brew of troubles—poverty, pollution, erosion, deserts, extinctions, regimentation, dictatorship, malnutrition, and starvation—the cancer of proliferation spreads.

Shall we not muster soon the skills and love to match the curbs we placed upon the tides of death with checks upon the multitudinous births?

The urban nations, the industrial lands, whatever the evils of metropolis and factory, at least have gained a balance, surcease from overbreeding. A second balance now, matching arrivals and departures across boundaries must be achieved. Illegal immigration must be stopped; else all the gains at home from stabilization and decline of population can be lost. Predict the future from our choices here.

**T**HE CHANGE OF HEART, the deep conversion, that we need, was under way a short time back, a few short years, and still flows on beneath the surface of our frantic lives. Just recently young men and women moved away from cities, found refuge in the countryside; and some of them remain. We turned away in some degree from worship of commodities. We set aside the notion that growth and expansion are always good. We recognized, if yet we cannot cope, that the constant speed-up of our lives cannot continue.

When shall we turn from avarice to function? From plethora to sufficiency? From competition to cooperation? From unremitting action to an ease in pleasure? When shall we search again for beauty in the sunrise? For joy in breezes across open fields? For rural music of the insects, frogs, and birds, not noise of traffic? For brilliant sunshine and clear skies by day? For silence at night?

Cloud shadows over America, leaping a continent; sunlight and shadow, dappling the valleys—what morrow?

—Anthony Wayne Smith



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