

NATIONAL PARKS

MAGAZINE



Everglades National Park, Florida

40th Anniversary
National Parks Association
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Fifty Cents

The Three R's and Resources

"The great American public has grown up under an educational system which taught that America could feed the world; that our natural resources were inexhaustible and why Hannibal crossed the Alps, but not one hint as to the future which awaited a nation depleted of its natural resources."—Jay N. "Ding" Darling.

PLANTS and animals depend on soil and water for their existence. Unfortunately, man too seldom realizes that he is equally dependent upon these basic resources. Not only do they supply him with food, shelter and clothing, but through their prudent use, he is permitted to enjoy the esthetic values of outdoor recreation—including those derived from national parks and wilderness.

To bring about conservation of natural resources in a democracy, large dependence must fall on education. As a prominent educational organization points out, "This is not something to be accomplished by fiat or decree. Instead, children now in school and grownups in the world of business and industry must learn the true importance of natural resources and acquire both the incentive and the 'know how' to use them wisely."

Resource conservation is so broad a field that it can be incorporated into most classroom subjects. Students of history can be taught that poor soil and water practices contributed to the downfall of once-great civilizations. Geography teaches that settlements of man were located on streams, lakes or seas for reasons of transportation and commerce and that good soil and forest resources gave rise to rich farming and lumbering areas. Science and health have other obvious relationships to our natural resources, as do economics, politics, and current events.

In addition to inclusion of the subject in formal instruction, there are also many opportunities for teaching conservation outside of the classroom. In a Claiborne County school in Tennessee, children improved a terrace in the background of their play area with vines and grass. After heavy rains in Whittier, California, the grounds of a school showed signs of soil erosion. Fifth-graders developed a rock garden to protect the soil and then established a bird sanctuary. In a Georgia school the students have planted a school vegetable garden. At a midwestern school students planted and cared for a windbreak, while Oregon youngsters are replanting a burned-over forest.

School grounds are not only places to play, but are the nearest real laboratory the children have for learning how to conserve soil and water. Sad is the schoolground covered entirely by concrete and asphalt, with no thought given for any natural outdoor study area or school forest.

A crying need during the past decade has been more materials for the classroom teacher to use—textbooks, pamphlets, pictures, photographs, charts, films and slides. Now that a start has been made in this direction, there seem to be other limiting factors. One is a lack of teachers

having conservation training. Teachers colleges can correct a part of this, but workshops and summer training should also be expanded. The most important failing, however, is *lack of public support* and understanding of the needs for conservation education. We must win the backing of community leaders and organizations. All the books and pamphlets in the world will do no good in a community whose leaders fail to sense the need for resource training.

"Conservation in the Schools" is the goal of this year's National Wildlife Week, March 15-21, sponsored by the National Wildlife Federation. Each member of the National Parks Association can help in this year-long effort by: (1) finding out if conservation is being taught in the schools of your community; (2) learning if children in your schools have an opportunity to take part in outdoor conservation projects or camp programs; (3) talking with your local newspaper, radio and television editors about the importance of this program and asking for their support; (4) urging the program chairmen of your local civic organizations, women's clubs and sportsman-conservation clubs to include speakers on the need for more adequate conservation education; and (5) aiding in the establishment of a conservation education committee in your community.

Such a committee should include as many civic and conservation agency representatives as possible—teachers and school administrators, women's clubs, service groups, churches, and conservation agencies as well as farm organizations, PTA groups, youth groups and community planners. This group can be most helpful in interesting school administrators in appropriate conservation projects and in assisting them in securing materials and guidance from professional resource managers and specialists.

You can also help through your Association. We are planning a special fall issue of NATIONAL PARKS MAGAZINE devoted to conservation education. It will emphasize the materials on national parks which will be useful to teachers in explaining the purposes and need for these great areas. Your suggestions of materials to be included are welcome.

The ultimate aim of conservation education efforts must be to develop a people in whom the attitude of conservation is as much a part of their personality as courtesy, good manners, honesty and thrift. Your Association's primary concern is the preservation of the national parks unimpaired for appropriate public use by this and succeeding generations. Only a public informed about conservation of all resources can ensure such protection.—B. M. K.

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NATIONAL PARKS MAGAZINE

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Bruce M. Kilgore, Editor

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ON THE COVER

"Vastness" describes the look of the country in Everglades National Park, Florida. Much of the park is more water than land and is mostly covered with grass. The clusters of trees called "hammocks" make islands of vegetation in the open glades or among the pines. The unique "air boat" shown on the cover is the most practical transportation for Park Service personnel patrolling these open water sections. Florida State News Bureau photograph.

THE NATIONAL PARKS AND YOU

Few people realize that ever since the first national parks and monuments were established, various commercial interests have been trying to invade them for personal gain. The national parks and monuments were not intended for such purposes. They are established as inviolate nature sanctuaries to preserve permanently outstanding examples of the once primeval continent, with no marring of landscapes except for reasonable access by road and trail, and facilities for visitor comfort. The Association, since its founding in 1919, has worked to create an ever-growing informed public on this matter in defense of the parks.

The Board of Trustees urges you to help protect this magnificent national heritage by joining forces with the Association now. As a member you will be kept informed, through NATIONAL PARKS MAGAZINE, on current threats and other park matters, so that you may take action when necessary.

Dues are \$3 annual, \$5 supporting, \$10 sustaining, \$25 contributing, \$100 life with no further dues, and \$1000 patron with no further dues. Bequests, too, are needed to help carry on this park protection work. Dues, contributions and bequests are deductible from your federal taxable income. Send your check today, or write for further information, to the National Parks Association, 1300 New Hampshire Avenue, N.W., Washington 6, D.C.

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Our "Everyday" Waters

Juanita Mahaffey

WERE you among the 60 million visitors to America's national parks last year? If you were, it's a good guess that you came away with a new consciousness, in one degree or another, of one gift of nature that wields a great influence in our daily lives—water.

A view of the breathtaking 308-foot lower falls of the Yellowstone was never-to-be-forgotten beauty to thousands on temporary release from shop or office.

Others drank the mineral waters of Platt National Park and gained a new feeling of physical well-being.

Thousands swam in the invigorating waters at Hot Springs National Park and delighted in still another of America's park areas preserved from commercial exploitation and set aside for all to enjoy.

Eager anglers waded the sparkling trout waters of Yosemite and knew the thrill of battling a leaping cadence of finny dynamite.

Water contributes generously to the pleasure of every individual who uses the national parks, whether he goes there as casual sightseer or planned vacationer. Consciously or sub-consciously, these millions of travelers are grateful for the areas designated by thoughtful forebears for permanent protection in our national park system.

In these beauty-steeped havens a part of your tax dollars pays for alert and dedicated service in natural resource conservation. No hunter's gun disturbs the lair of brown bear, trumpeter swan, or hundreds of other wild creatures that share their environment with human visitors. No plowshare breaks the sod to wash as silt into crystal streams. No woodsman's ax swings lethal blow to timbered giants standing centuries-old guard over these carefully selected acres. We, the public, use and enjoy these half-tamed wilderness areas, but stout laws and good

maintenance decree that we leave them unspoiled for generations yet to come.

Would that all America could be as thoroughly used, yet as carefully shielded from mass human spoilage! In our busy world and our headlong rush to make a living, a population now grown to 175 million heaps shameful indignities upon our land and our waters in many places.

There are segments of our country where water pollution and its effects on fish, wildlife, and human resources point the finger of hypocrisy at us all. For these are parcels of the same America about which we sing in patriotic fervor:

"I love thy rocks and rills,
Thy woods and templed hills."

Take a stroll (if you have a strong stomach) along the historic Missouri River near St. Louis. This great waterway which led America's early explorers far upstream to the northwest in quest of fur and forest riches, flows into the Mississippi at St. Louis. Last year when the Public Health Service began a series of conferences on pollution in the area, some shocking facts were publicized. Eighty separate sewer outlets were found to be dumping pollution into the river. Sewers as large as 30 feet in diameter discharged fluids colored red, blue, green, yellow, or brown, depending on the source of their load. Thick scums of grease or blankets of chicken feathers actually clogged the water intake tubes of Coast Guard vessels working on the Mississippi. The city flushed as much as 60,000 tons of ground garbage into the river each year and on some days it ran as high as 300 tons. In addition, 460 tons of sewage solids were reaching the river each day. Upstream along the Missouri similar situations existed at Kansas City, St. Joseph, Omaha, Council Bluffs, and Sioux City.

Juanita Mahaffey is a conservation writer in the Water Supply and Water Pollution Control Program of the U. S. Public Health Service, Washington, D. C. Prior to this assignment, she served for fourteen years as editor of *Oklahoma Wildlife* magazine. Her Oklahoma conservation career, which dates back to 1928, includes establishing the Oklahoma Wildlife Conservation Department's first information-education program in 1945. Miss Mahaffey is a past president of the American Association for Conservation Information.

Along the southern gulf coast millions of tourist dollars flow into the tills of hotel owners and others having public services to sell. Lately scores of fabulous freshwater swimming pools, constructed within yards of once famous salt water beaches, are claiming a big percent of the profit. The gulf water is too befouled by sewage for swimming. It's like "robbing Peter to pay Paul." If moneys spent to build swimming pools could go into pollution clean-up, everyone would gain.

In some of the great oil-producing regions of the Southwest are streams that carry brines, crude oil, and other wastes from adjacent oil fields and refineries. Fish and other aquatic life have long since disappeared. In the name of "needed industry" in their areas, some oil operators have gotten by with these stream-fouling practices for years. What price industry when it destroys our natural resources?

At South Bend, Indiana, a study of the St. Joseph River is in progress to determine the sources of numerous pollutants now flowing into the stream. In one east-side sector, stores, homes, and industries are emptying their sewage wastes directly into the river. A local law says that such contamination is illegal if there are interceptor sewer lines within 100 feet of the establishment. In South Bend the east-side offenders are within the law. There



A litter-filled Potomac River (above) near our Nation's Capital reflects the current lack of concern about quality in our everyday waters. A slush pit (below) containing oil well drilling fluids has been allowed to overflow into the Washita River in Oklahoma.



are no interceptor lines that near.

On the Susquehanna River near Montgomery, Pennsylvania last July 19, a sudden influx of pollution from a source or sources unknown killed thousands of game fish. Newspaper reports hinted that mining wastes or effluents from a knitting mill might be responsible. The fishermen of the area became incensed. The Sunbury Hunting and Fishing Club and the Milton Fish and Game Association (of nearby towns along the river) banded together to press for a solution. An official State investigation followed. When sportsmen see tangible evidence that pollution is depriving them of their sport, they usually take action, and fast.

These few examples are not condemnations of the areas where they occurred. All across the country and around our ocean shores similar problems exist in greater or lesser degree. Water supply and water pollution problems are not new. They are as old as history. But never have these problems been so intensified, never the need for clean waters so gigantic as they are today in our country.

The reasons are obvious: a fantastic growth in population, predicted to continue upward; industrial expansion brought about by hundreds of new products designed for easier, more luxurious living; an economy which has provided people more money and installment-buying power to use the new products; a mass farm-to-city movement of people; large-scale farming which uses increased volumes of water for irrigation.

The growing number of visitors to our national parks each year is indicative of the tremendous build-up everywhere—more people, more homes, more leisure time, more automobiles, thousands of miles of new and improved highways, greater claims on our recreational and natural resources. It all adds up to unprecedented water requirements and pollution disposal problems that outdistance our best clean-up efforts to date. The problem isn't *how* to clean our waters; we already *know* how. The problem is to *get it done*. This depends on an *informed* public and strong public demand.

The Susquehanna River incident, where Pennsylvania sportsmen saw their game fish floating dead from

pollution, may portend one important answer to today's water ills. Water problem analysts, who strive to awaken a largely indifferent public to the impending water crisis, will find fishermen and hunters a receptive audience. These groups invariably spring into action when they see fish and wildlife endangered. And these groups comprise 25 million of the United States' population.

Add to this the countless other millions who are using all available clean waters for boating, swimming, water skiing, and skin-diving. They form a big army which quite obviously can be enlisted in a fight for clean waters.

What happens when a stream is poisoned by pollution? Charles H. Callison, conservation director of the National Wildlife Federation, testifying last year before a Congressional committee, said:

"The contamination of the public waters of America by dumping untreated sewage and industrial waste into them is nothing more than the literal, physical destruction of natural resources.

"Its waters cannot be used for household purposes except after costly treatment.

"Industries requiring clean water for their processes have to seek plant sites elsewhere.

"The waters cannot be safely used for swimming, boating, water skiing, or other forms of aquatic recreation. Parks and playgrounds along the shoreline must be posted with warning signs.

"Farmers cannot use the streams to irrigate their fields or water their livestock.

"Fish die in these waters. Waterfowl and other wildlife shun them.

"Real estate values decline along the polluted river, because no one wants to live above the stench of an open sewer.

"All of this, gentlemen, is sheer waste. It is worse than waste, it is needless destruction of natural resources that this Nation can no longer afford."

We have made a start in the right direction. But a 50-year backlog of pollution which shifted into high gear the past 15 years cannot be erased overnight. The Water Pollution Control Act of 1956 (Public Law 660) authorized Federal grants to communities to encourage and assist in the construction of municipal sewage treat-

ment works. This law is administered by the U. S. Public Health Service, although requests must originate locally and come through the State agency having proper authority (usually the State Health Department).

From the time President Eisenhower signed the Act in July, 1956, through December, 1958, a total of 1337 projects had been approved, involving more than \$113.7 million in Federal grants and \$481 million in local community funds. Every state and the District of Columbia have shared.

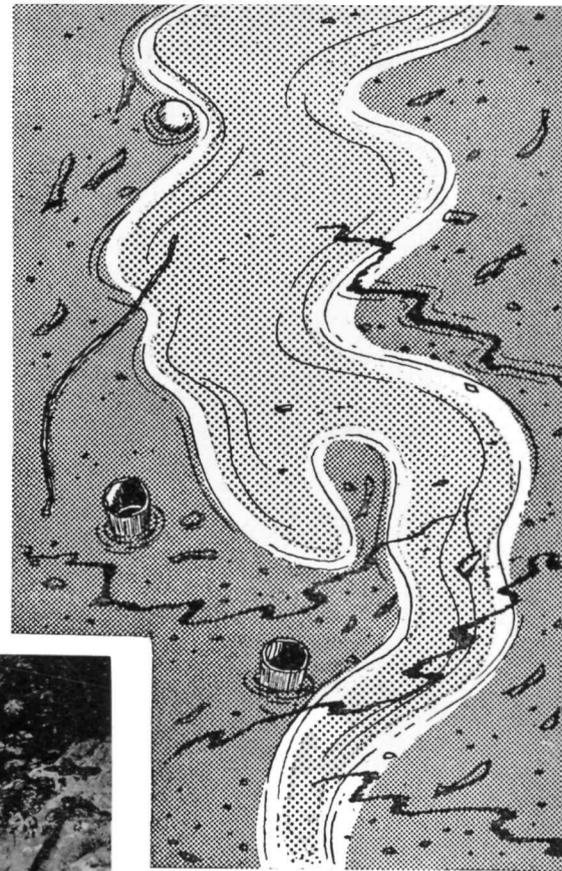
Still needed are some 15,000 municipal and industrial treatment works, costing roughly nine billion dollars,

intend to see their sports decline for want of clean waters.

Sixty million national parks visitors would voice their objections as stoutly if the beautiful waters in the parks were endangered by pollution. Their concerted defense, too, of water resources nearer home is needed.

It is not by accident that the park waters flow clean and unpolluted for our recreational pleasure today. A love of America, foresight, laws, appropriations, dedicated public service—all these gush, invisible but potent, in the streams, geysers, springs, and lakes of our national parks.

And America needs the same qual-

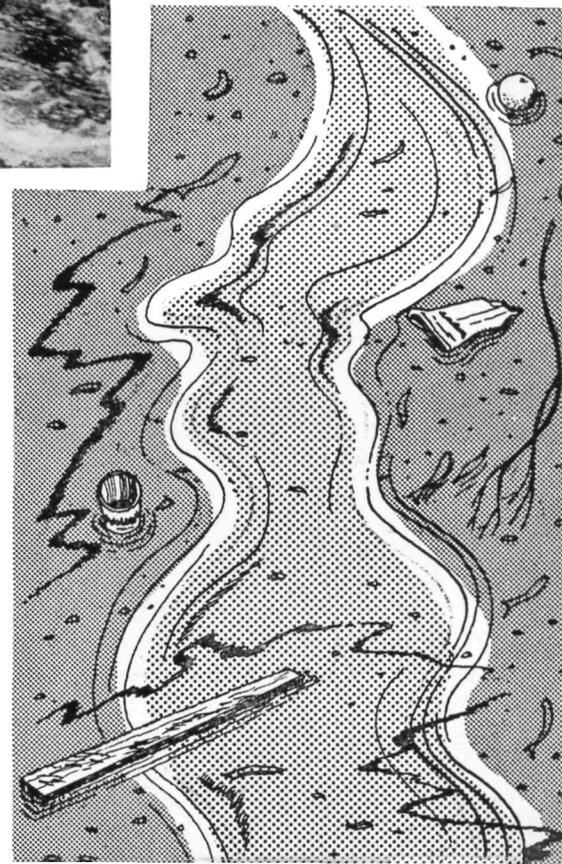


At left is the Little River in Great Smoky Mountains National Park, North Carolina-Tennessee. America needs the same quality waters at St. Louis, South Bend and the Susquehanna as those that grace our national parks. Photograph by Ralph H. Anderson.

the U. S. Public Health Service estimates. If a dollars-and-cents evaluation were made of pollution damages occurring nationwide, it would give impetus to the program, particularly in industry's obligation to shoulder its share of the load. But there is also an intangible loss that can never be evaluated. Who can place a price on a pleasant day's fishing with your young son in the stream which runs through or near your city?

Conservationists make themselves heard. Twenty-five million Americans who seek recreation with gun and fishing rod in field and stream do not

ity waters at St. Louis, South Bend, and the Susquehanna as those that grace Yellowstone and Yosemite. Granted that waters used by commerce, industry, agriculture and householders must be used and cannot be preserved in pristine splendor like those in the parks. But America needs to clean up the waterways where we live and work during the fifty weeks of the year when we're not vacationing. There is much we can do to make our "everyday" waters healthier, pleasanter, and more usable. Is this too much for a Nation which constantly achieves superlatives in her many other endeavors? ■





A Tale of Ten Thousand Wasps

Howard and Mary Alice Evans

An associate professor at Cornell University, New York, Dr. Evans is a specialist on the systematics and behavior of solitary wasps. His wife, Mary Alice, who has taught biology at Hood, Simmons and Wells Colleges, is presently occupied with raising a family. This article is their popular account of a portion of one chapter of his book on wasps published by Cornell University Press.

EVERGLADES National Park probably contains a richer assortment of wildlife than any other national park. To the tourist it is a vast showplace of tropical birds and reptiles, many of which can be seen from the roadside. To the naturalist it is a treasurehouse of plants and animals, some of which occur nowhere else in the United States. Even the casual visitor can grasp something of the great diversity of life. The pine forests at the entrance to the park quickly give way to a vastly different scene of endless sawgrass interrupted by occasional hammocks—the hammocks themselves differing greatly in size and composition. This scene in turn gives way to an incredible tangle of mangroves growing with their roots in salt water. Finally, at the end of the road at Flamingo, one finds himself at the edge of an extensive prairie of low, salt-loving plants along the shore of Florida Bay. Those who explore the park by boat find still further scenes awaiting them, each with its characteristic plants and animals.

So much remains to be learned about the denizens of the Everglades that it is perhaps not surprising that we have discovered an incredibly large assemblage of one creature, the presence of

which is wholly unchronicled, so far as we know. The coastal prairie running from Flamingo to the outer banks of Cape Sable is inhabited by one of the largest aggregations of digger wasps we have ever seen—in a lifetime devoted to studying these insects. This species, *Bembix cinerea*, occurs up the west coast of Florida as far as Cedar Keys and up the Atlantic coast as far as Cape May, New Jersey. Yet the major insect collections of the country contain only a few specimens, all from areas of extensive salt flats. Apparently this digger wasp has escaped competition with other species by becoming adapted to what is, for a digger wasp, a most unusual habitat: the bare, hard soil of the coastal salt flats. The colony at Flamingo may well be the largest one of this species anywhere.

We first discovered *Bembix cinerea* quite by accident in 1953 during a quick trip through the park. We returned in April 1954 and again in May 1956, when, with the cooperation of park officials, we were able to study and photograph these wasps as part of a comparative study of the behavior of digger wasps. Both times we camped beneath the same coconut palms at Flamingo—an area now vastly changed by Mission 66, we understand. By day we ventured far out onto the prairie with our cameras and other equipment, always on the alert for showers; for a heavy rain can give the soil in this area the consistency of chewing gum. In the evening we wrote up our notes and cooked our supper to the incessant rustling of the palms and the strident calls of sea birds.

In retrospect it all seems idyllic, but our journals assure us that it was not entirely so. Horseflies dined on us

through a fiery sunburn, and at dusk it was a quick dash for the tent before the mosquitoes descended. While we slept other things were afoot. One morning we discovered that several tins containing wasp larvae had been opened and the contents dumped. Worse, our plastic icebag, which we had left just outside the tent, had been neatly unzipped. Missing were our bacon, cold cuts, and cheese. Our six eggs were lying on the ground, four of them unbroken. 'Coons?

But all that was quickly forgotten in the excitement of the day. We had scarcely finished eating our four eggs (without bacon) when *Bembix* wasps began flying about us. Out on the salt flats, a bit later, the whole landscape seemed to heave with an undulating mass of insects. In some places the swarm consisted of countless thousands of males engaged in their nuptial dance, a continual circling about over the surface of the ground from early morning until sunset. In other areas females swarmed about the shallow nests which they had dug in the hard soil. For several miles there was scarcely a bare place which was not occupied by at least a few *Bembix*, and in some especially favorable places the nests of the females were so close together that the ground was literally honeycombed with burrows.

Surrounded as we were by great numbers of wasps in all stages of their various activities, it took us only a few days to learn a great deal about them. We found, for one thing, that the burrows were always very shallow, only about four inches deep. Each burrow terminated in either one or two cells, in which the female laid an egg and reared her larvae to maturity on a

diet of flies. These flies were stung to death and then carried very swiftly into the nest, the entrance to which was never closed except at night. Very commonly, a female laden with a fly would be pounced upon by other females intent upon stealing the fly; sometimes a ball of four or five struggling wasps would be formed before one of them emerged with the fly, only to shortly become part of another struggling ball. It was a wonder some of the larvae did not starve! But each larva ultimately received its quota of twenty to thirty flies, whereupon it would spin its cocoon and remain dormant until later in the year.

Each female, we believe, prepares about eight to ten successive nest cells in her life. Estimating 10,000 females in this aggregation (a very conservative estimate), each making, let us say, five cells and stocking each with twenty flies, we arrive at a minimum figure of one million flies consumed by this colony of digger wasps. The flies most commonly used are the horseflies or "green-eyes" so pestiferous to humans and to wildlife in the area. Of three kinds of horseflies we found in the nests, one proved to be a tropical species previously unrecorded in the United States. One of the other flies, a green "soldier fly," proved to be completely new to science and was ultimately named *Eulalia evansi*, though credit for its discovery more properly belongs to *Bembix*!

All of this points up an important function of national parks which is not always considered. As our population increases and spreads over the land, there are becoming fewer and fewer places (particularly in Florida) where one can seriously study animals in their natural setting. And one should not think of the wildlife of parks merely in terms of egrets, alligators, and bears. Insects and other invertebrate animals often make up in numbers for what they lack in size, and their role in the economy of nature is often as great, if not greater. The naturalist thinks of a national park as a vast *refugium* of animals and plants of many kinds, all retaining their natural balances and relationships free from the heavy hand of man, the predator, for all time—or at least that is his dream. ■



Florida State News Bureau

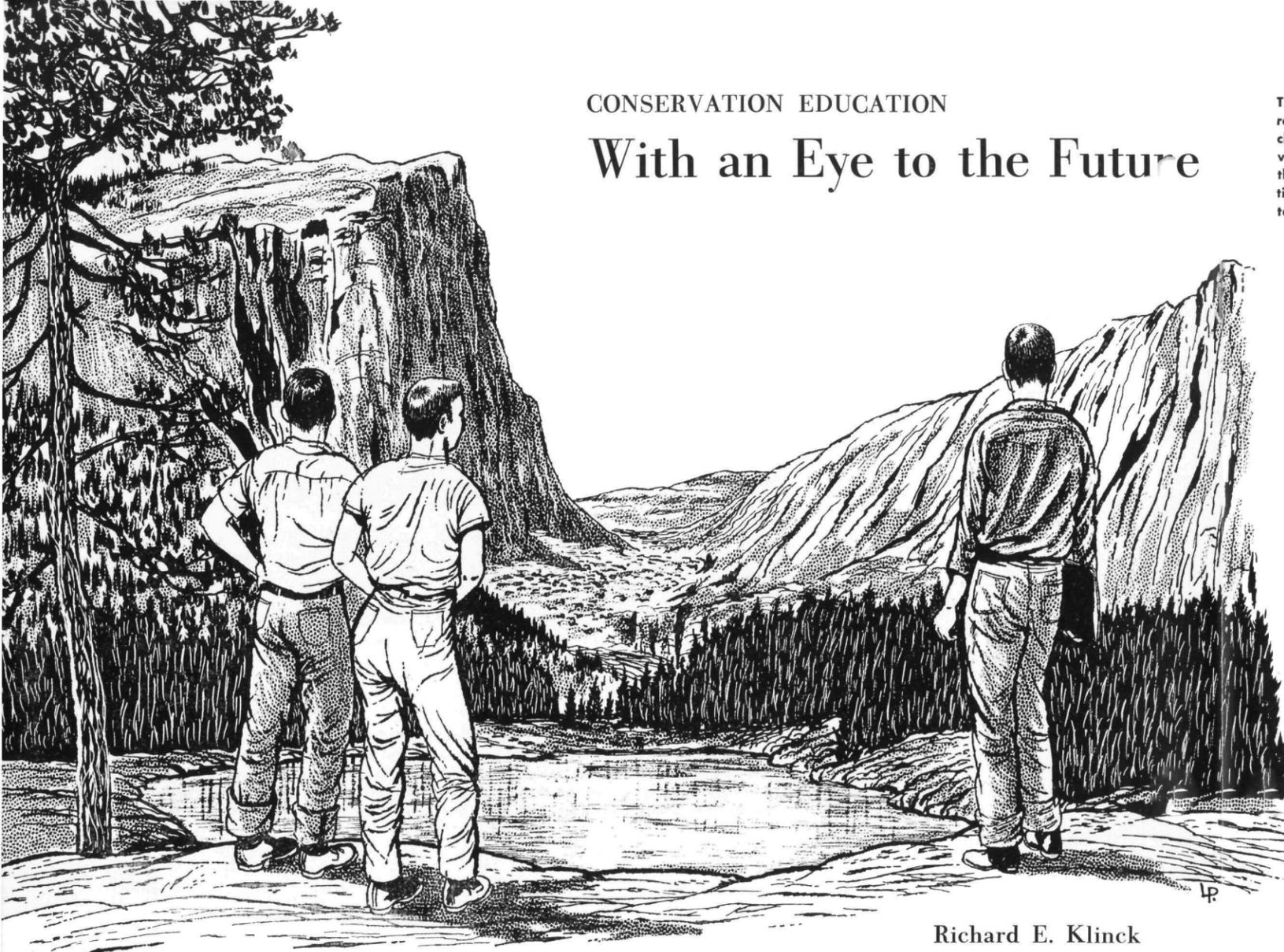
Along the Anhinga Trail (above) in Everglades National Park, Florida, a park ranger describes some of the great variety of plant and animal life found in this tropical wilderness. Widely known for its large rookeries of birds and its alligators, the park also provides sanctuary for insects such as the *Bembix* wasp shown on the opposite page and other invertebrate animals. Cabbage Palm trees and sawgrass (below) are characteristic features.

Arthur F. Fawcett



CONSERVATION EDUCATION

With an Eye to the Future



Richard E. Klinck

I LOVE our national parks. As do you, I find in them beauty and peace of mind, an inward calmness and satisfaction. But I fear for their continued sanctity and preservation. And so, as a teacher, I have put an eye to the future.

On a bright morning late last May, I loaded my thirty-two sixth-grade youngsters aboard a black and yellow school bus and together we set out to make that future more secure. Our goal was Rocky Mountain National Park, some seventy miles northwest of our Wheatridge, Colorado classroom.

Five weeks earlier we had begun a detailed study of conservation. Using soil, water, minerals, forests and wildlife, we tried to capture the real conception of conservation by reading, discussing, and experimenting. Then we

went a step beyond, speaking of conservation of scenery and beauty. Thus we first embraced the idea of preservation rather than conservation.

Here was an idea new to my youngsters. It had to do with saving something so that it could be used, but not used up, at least not to any appreciable degree. It was a concept difficult to discuss and more difficult still to understand, this idea of preserving beauty, an intangible that is so easy to destroy and so hard to keep untarnished. I chose to emphasize this idea by introducing them to the national parks as the prime embodiment of the preservation ideal. I wanted them to see *what* we must concern ourselves with saving, *why* we must be on guard against their destruction, and *how* each person, no matter what his

A sixth-grade teacher in Wheatridge, Colorado, Mr. Klinck is a familiar author to long-time Association members. With his wife and little girl he spends most of his summers traveling and camping out in our national parks and monuments. His book, "Land of Room Enough and Time Enough" is the story of Monument Valley on the Arizona-Utah state line.

age, can help in their preservation. To see "What is a national park?" we looked first at the parks via a selection of slides I had taken on my visits to them. I picked the slides with an eye toward showing the wide range and high quality of beauty and splendor that sets an area apart as being worthy of preservation. We traveled

The author's Wheatridge, Colorado sixth-grade class helped clean up a campground in Roosevelt National Forest. In so doing, they helped in a small but practical way to preserve our heritage of natural outdoor beauty.



We looked at beaver dams on a creek in Rocky Mountain National Park and learned how wildlife helps in our preservation efforts. In this great outdoor classroom, we saw the matchless undisturbed wonders of a national park.



Ranger-naturalist Frauson told of the great variety of plant and animal life preserved in Rocky Mountain and explained the reasons for its designation as a national park. Later, back in the classroom, the students were tested on what they had learned.



across the United States via the national parks, pausing long enough in each so the boys and girls could see how truly matchless our parks are and how we have picked out only the most perfect and sublime areas to save.

The slides stimulated discussions and the youngsters who had visited any of the parks shared with the others their recollections and impressions. Gradually we began to see that there was, indeed, a splendid reason for preserving such places. We made reports upon the history and wonders of each of the parks, and then each student found all thirty of them upon his own map of the United States, labeling them neatly, and carefully noting their location.

We listed only the national parks, for they represent the epitome of perfection. Then, as another project, we filled a chart with the names and purposes of the many other national park system classifications and called attention to the fact that the National Park Service is called upon to preserve treasures of many different kinds. But each is a special treasure, and it is guarded carefully.

On individual maps of our state, we located the Park Service areas in Colorado, a state where we are fortunate enough to have two national parks, five national monuments and a national recreation area. Then we went back to the helpful slides again and came closer to home by showing only the areas we had just placed upon our state maps. In the end we agreed it is important that others have the same opportunity we do—to see and enjoy these marvelous places, not only today, but through all the tomorrows as well.

We had agreed that the national parks were precious and we should guard them for the future—but guard them against what? Why did they require our constant vigilance? As an answer, we talked of how a national area could be destroyed; and the youngsters themselves found the answers—logging, hunting, excessive road building, commercial development, and so on.

We discussed the dangers in each of these; but by and large, they were problems to be handled by adults, not children. Still, there was one more way to destroy—perhaps the way most

easily understood for a boy or girl of twelve. Each of us can lose our magnificent heritage of beauty by simply being careless and uninformed. We can carve on trees and cut them down, destroy signs and take away souvenirs, pick wild flowers and harm wild animals, be careless with fire, discard litter and do damage a hundred other ways, each just as surely destroying our national parks as would harvesting all the timber or opening them to mining.

Now we were getting somewhere! Here were the ways that each of us could help, beginning today. We could avoid these careless and destructive habits! But so far it had all been talk with us. Saying was one thing—doing another. Now it was time to take our classroom and move it out of its four walls—to transplant it to the very places we had been discussing.

So, on that bright May morning, our yellow and black school bus took twenty boys and twelve girls into the outdoors, where the horizons were our only restrictions—and they could be pushed back at will. We went first to Roosevelt National Forest where we met the district forest ranger and talked with him at length. We learned of his forest and his duties there, and then took part in a campground cleanup, realizing that this was something each of us could do *now* to help safeguard our heritage.

Then we went on to Rocky Mountain Park for the climax of our day-long adventure. We entered by the Fall River Entrance and proceeded through Horseshoe Park to the beginning of the Trail Ridge Road. At Hidden Valley, Ranger-Naturalist Robert Frauson met our party and took over. In our great outdoor classroom, in a valley carved out by the predawn activities of a great glacier, we saw the matchless undisturbed wonders of our precious national park—its great forests, sweeping valleys and high white mountain summits. As the youngsters crowded eagerly around the tall man in the park ranger uniform, Robert Frauson explained the reasons behind the setting aside of this area called Rocky Mountain.

Inside Hidden Valley Lodge we heard an excellent thirty-minute illustrated lecture and learned of a ranger's

many duties. Mr. Frauson touched briefly upon the glamorous side, and then dwelled longer on the behind-the-scene duties which were nonetheless interesting and exciting to his young audience.

He talked of Mission 66 and its preservation goals. Then he distributed to each of us a park pamphlet and a variety of Smokey Bear materials emphasizing the fire prevention angle of preservation. Fifteen minutes of questions and answers followed before we returned to our bus and began the journey home.

On the following day, though back in our walled classroom, we “revisited” Rocky Mountain National Park to discover just what we had gained there. We discussed the adventure via the notes each person had been instructed to take, went over our checklist to determine if we had seen everything we had set out to see, examined the park brochure to note what it added to our now-rich knowledge and then approached the whole park ideal on a more solid footing than we had some weeks before. Later I tested them on both the factual and philosophical nature of our trip, and the answers given were used for still another review on another day.

As the final chapter in our national parks adventure together, just two days before school was out for the summer and many of these boys and girls would be visiting national park areas, we made individual litter bags for the family car. We designed the fronts of them and fashioned coat-hanger holders so they could be easily used. I later learned the litter bags became matters of personal pride and were faithfully used during the trips of the summer months. Furthermore, I discovered that many an adult ear had been bent in the right direction by the straight-forward remarks of the younger generation upon the matter of outdoor conduct!

In all, we invested six weeks in trying to assure a less endangered future for America's most precious treasures. It was, I believe, six weeks well spent, for there are now thirty-two more Americans who have begun to love their national parks.

And because of this, I feel a little safer ■

YOUR NPA IN ACTION

Our New Address

By March 1, 1959, the National Parks Association will have completed the process of moving to beautiful new offices at 1300 New Hampshire Avenue, N.W., Washington 6, D.C. Since the move to 2000 P Street, N.W. was undertaken in September 1957, steadily increasing activities in the headquarters offices have made additional space imperative; it has been obtained at no increase in rent.

Action Groups Organized

With the establishment of the Yosemite and Smoky Mountains NPA Action Groups, the Association's field program has taken another step forward. The Yosemite group was established in late 1958 under the chairmanship of Miss Charlotte Mauk, 1133 Miller Avenue, Berkeley, California. The Smoky Mountains group formed in January is headed by Dr. Daniel Payne Hale, 240 Scott Street, N.E., Knoxville 17, Tennessee.

More such groups are expected to be formed in the near future in various sections of the country. Members interested in working with such committees and particularly those having special knowledge of national parks and monuments in their vicinity should contact Association headquarters for more information.

The action groups will be expected to keep in close touch with the Park Service regarding plans being developed for their park area. After careful study, the groups will make recommendations to the national association on these plans and suggest ways the association can be of service. In this way, the Association can have the benefit of continuous on-the-ground information. This should be most valuable in enabling the national office to take appropriate action far enough in advance to be helpful to the Park Service in its long-range planning. Suggestions from members regarding this program are solicited.

NPA on Porcupines

Toward the end of 1958 your Association took a strong stand on the Porcupine Mountains State Park mining lease

controversy. A portion of a statement by Executive Secretary Anthony Wayne Smith, submitted at a public hearing in Lansing, Michigan, is as follows:

"The federal government gives relatively strong and dependable protection to the national forests and the national parks. It does not permit the invasion of the national parks by destructive mining, logging, road building, and dam building. The national parks are looked upon as areas held under inviolate trust for the people as a whole.

"But our state governments have been weak. All too frequently they have not built up adequate state park and forest systems, nor provided adequate outdoor recreational opportunities. And where they have created these facilities, they have not protected them. They have sometimes permitted destructive logging within them, and all too frequently they have permitted invasion by private mining interests.

"The proposed invasion of Porcupine Mountains State Park by copper mining interests is intolerable. Conservationists can do nothing but protest and fight against such an invasion with every means at their command. State government administrators must be made to understand that they must not squander the heritage of the people of their states in this profligate manner. And it makes no difference whether the decision is camouflaged as a plan to return revenues to the state park system or otherwise; if such invasions are permitted, there will be no state park system to operate, with or without funds.

"This is a test of the ability of state governments to handle park administration. People often deplore the centralization of power in the federal government. But if state governments cannot set up adequate state park systems and give them the needed protection, then obviously the federal government must take over. This is the way our decentralized state governmental system could break down. We call upon the Michigan Conservation Commission to demonstrate that our states have the ability to govern themselves in these matters."

As reported in the *News Briefs* section of the February 1959 NATIONAL PARKS MAGAZINE, withdrawal of the mining lease request by the Bear Creek Mining Company has for the time being ended this controversy.



travel tips

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The Parks and Congress

86th Congress

Legislation Introduced

Unless otherwise noted all bills have been referred to either the House or the Senate Committee on Interior and Insular Affairs.

Proposed National Parks

H. R. 49 (Boland) **H. R. 3050** (O'Neill) To authorize the establishment of the Cape Cod National Park in Massachusetts to include not more than 30,000 acres of the Great Outer Beach in the vicinity of the towns of Provincetown, Truro, Wellfleet, Eastham, Orleans, and Chatham. Awaiting National Park Service report before hearings can be held. Same as **H. R. 12449** and **H. R. 12456** introduced in 85th Congress.

H. R. 231 (Price) **S. 1001** (Douglas et al.) Authorizes acquisition of up to 3500 acres (5000 acres in **S. 1001**) on the southern shore of Lake Michigan between Ogden Dunes and Dunes Acres and the adjacent inland area lying south of such shore for the Indiana Dunes National Monument.

H. R. 915 (Reuss) **S. 894** (Wiley) Authorizes the establishment of Ice Age National Park within 34 Wisconsin counties where outstanding features of continental glaciation are found. Area to be determined by Secretary of Interior in conjunction with local government. Essentially same as **H. R. 13310** to establish Moraine National Park introduced in 85th Congress. Awaiting National Park Service survey.

H. R. 951 (Saylor) **S. 160** (Allott) To establish Dinosaur National Monument in Colorado and Utah as a national park. Identical to last year's bills, **H. R. 935** and **S. 2577**. Allott's bill still differs from Saylor's in that it contains the controversial wording providing for investigations of "the suitability of reservoir and canal sites."

H. R. 953 (Saylor) **H. R. 2331** (Foley) **S. 77** (Beall) To establish the Chesapeake and Ohio Canal National Historical Park, Maryland. Initially the park shall contain 4800 acres of federally-owned land situated along the C&O Canal between the terminus of the George Washington Memorial Parkway (above the Great Falls of the Potomac River) and the city of Cumberland, Maryland. Total lands acquired shall not exceed 15,000 acres. **S. 77** is same bill as passed Senate last year. Both it and **H. R. 2331** contain a provision for possible authorization of future navigation, flood control or power projects.

H. R. 1932 (O'Neill) To authorize establishment of Minute Man National Historical Park in Massachusetts. Would preserve the area where the initial events of the Revolu-

tionary War took place on April 18 and 19, 1775. Not to exceed 750 acres. Includes Lexington-Concord road.

S. 4 (Yarborough) Authorizes the Secretary of the Interior to acquire lands for and establish the Padre Islands National Park in the coastal area extending from Corpus Christi to near Brownsville, Texas. Same as **S. 4064** introduced last session.

General Park Bills

H. R. 285 (Thompson) **H. R. 963** (Smith) **H. R. 3878** (Wright) Would amend Federal Highway Act of 1956 to require written opinion of the Secretary of Interior that land sought for a highway will not adversely affect the national policy of preserving for public use historic sites, buildings, and objects of national significance. Similar to **H. R. 9511** introduced in 85th Congress. Referred to Committee on Public Works.

H. R. 2222 (Siler) Would provide \$175,000 to make a survey of a proposed national parkway from the Great Smoky Mountains National Park in North Carolina and Tennessee to the Mammoth Cave National Park in Kentucky, and the Natchez Trace Parkway in Tennessee.

H. R. 4307 (Tollefson) To authorize the Secretary of the Interior to construct "an adequate hotel including all necessary appurtenances and equipment" within Mount Rainier National Park, Washington. Also provides that the Secretary may handle operation and maintenance by leasing.

S. 713 (Bennett and Moss) **H. R. 4356** (Dixon) To revise the boundaries of Zion National Park in Utah by adding approximately 3500 acres. According to sponsors, one purpose of the proposed change is to provide "access to the Kolob Creek section which has been neglected for many years. It would also permit the proposed future development of a road from Hop Valley to the park."

S. 826 (Murray) Would enlarge the Devils Tower National Monument in Wyoming from its present 1266 acres to 6613 acres—approximately 4 times its present size. Would include the adjacent Missouri Buttes.

S. 575 (Magnuson) To provide for the preservation of historical and archaeological data (including relics and specimens) which might otherwise be lost as the result of the

construction of a dam. Any agency of the United States before undertaking construction of a dam would give written notice to the Secretary of the Interior, who would make a survey of the area so that as much historic or archaeological data as is feasible might be collected and preserved.

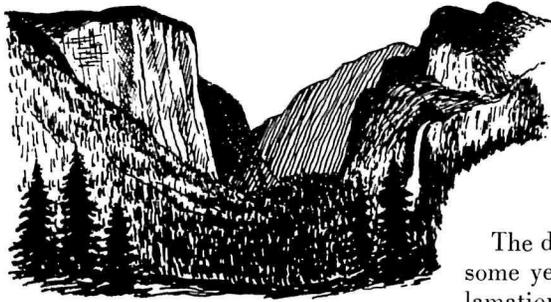
General Conservation

H. R. 713 (Baldwin) **H. R. 1867** (Miller) **H. R. 1873** (O'Hara) **H. R. 1885** (Reuss) **H. R. 1929** (Metcalf) **H. R. 1960** (Saylor) **H. R. 2187** (McGovern) To establish a National Wilderness Preservation System. Essentially the same as **S. 4028** and **H. R. 13013** (The Wilderness Bill) in the 85th Congress but with additional clarifying amendments incorporated following western field hearings held in November 1958.

H. R. 2409 (Lipscomb) **H. R. 3611** (Blatnik) To encourage private industry in the prevention of air and water pollution by allowing the cost of treatment works for the abatement of air and stream pollution to be amortized at an accelerated rate for income tax purposes. To Committee on Ways and Means.

H. R. 3610 (Blatnik) To amend the Federal Water Pollution Control Act to increase grants to municipalities for construction of sewage treatment works and to establish the Office of Water Pollution Control. Would double the present monetary grant limit from \$250,000 to \$500,000 but hold the federal grants to 30 percent of project cost. Would remove the program from the Public Health Service and place the Office of Water Pollution Control directly under the Secretary of Health, Education and Welfare.

H. R. 3709 (Blatnik) **S. 812** (Humphrey and 19 co-sponsors) To authorize the establishment of a Youth Conservation Corps to provide healthful outdoor training and employment for young men and to advance the conservation, development, and management of national resources of timber, soil, and range, and of recreational areas. Establishes a Youth Conservation Commission in the Department of Health, Education and Welfare. Corps to have 150,000 maximum, at least 85 percent of whom must be between the ages of 16 and 22. Provides a base pay equivalent to lowest rank of army enlisted personnel, and subsistence clothing, medical care, transportation and education. To House Committee on Education and Labor and Senate Committee on Labor and Public Welfare.



Conservation News Briefs

National Parks and Monuments

An informal meeting on January 8, 1959, at the Arizona Power Authority headquarters in Phoenix, Arizona, has given impetus to plans for hydroelectric dams on the Colorado River above Hoover Dam and below Glen Canyon Dam. High dams at either of the two sites mentioned at this meeting—Bridge Canyon and Marble Canyon—could have major effects on Grand Canyon National Park and Grand Canyon National Monument.

The meeting, presided over by Jon D. Goree, APA chairman, is reported in Arizona papers to have “handed” Arizona Governor Paul Fannin the task of “putting a united Arizona behind the state’s application to the Federal Power Commission for permission to build” such dams.

The state’s organized power and water interests are interested in the 2000-foot power drop said to exist between Glen Canyon Dam and the headwaters of Lake Mead. About 1000 feet of this drop lies within Grand Canyon National Park and another 300 feet is found within the monument. The Arizona press notes that the power drop within the park, “cannot be touched, at least until the whole parks and conservation policy of the nation changes. . . .” Describing the monument area, the state paper comments, “. . . a remote, federally-controlled region, generally inaccessible, but concerning which conservation interests have been touchy in the past. Whether this 300-foot drop is under the jurisdiction of the FPC remains to be seen.”

A primary concern at the meeting seemed to be the more than 600-foot power drop in the Bridge Canyon section of the Colorado River Gorge. Goree referred to this site as, “the most valuable undeveloped hydroelectric site remaining in the United States.”

The dam proposed at Bridge Canyon some years ago by the Bureau of Reclamation would have created a reservoir at an elevation of 1877 feet and thus invaded the entire Grand Canyon Monument plus 18 miles of the park. The current APA application pending before the Federal Power Commission includes a 450-foot dam in Bridge Canyon with the top at elevation 1590 feet and a 400-foot dam in Marble Canyon with the top at elevation 3150. According to the application, the proposed Bridge Canyon reservoir will extend to a point 190 miles downstream from Lees Ferry or about six miles downstream from the monument boundary. The Marble Canyon Dam would be located up stream from the park and about forty miles down stream from Lees Ferry.

While these current proposals will apparently not affect park lands, another “Prospect” damsite located six miles downstream from the monument boundary is mentioned in the APA application as “an excellent site which would remain available for future construction of a dam . . . should such be authorized by Congress.” The application describes the reservoir which would be created by “Prospect” dam as having an elevation of 1866 feet. Like the earlier Bureau of Reclamation proposal, this would invade all of the monument and part of the park.

Hearings are expected in late summer according to FPC personnel.

APA is a state agency and power from the dams would be used to supply “the growing requirements of the agricultural and industrial development within the state,” the application says.

The National Geographic Society received the commendation of Secretary Seaton for the financial support it will provide the National Park Service archaeological research team in exploring Wetherill Mesa in Mesa Verde National Park, Colorado. After preliminary archaeological research and excavation of the important ruins known to be located there, work will

begin on development of exhibits of prehistoric occupation similar to those now open to visitors in the Chapin Mesa area. This latter area contains all of the presently excavated ruins. Some national park conservationists have questioned whether the proposed road out Wetherill Mesa to these new sites should be built at this time.

General Conservation

The President’s Water Pollution Control Advisory Board in mid-December reiterated its unanimous opposition to a plan to turn the federal sewage treatment grants program over to the states. Board members were appointed by President Eisenhower. The Eisenhower Administration, on the other hand, has backed a proposal of the Joint Federal-State Action Committee to turn the treatment plant grants program over to the states under a system whereby the federal government would relinquish a portion of the telephone tax to help the states finance this program.

The Board stated that “. . . the program (as outlined in the Federal Water Pollution Control Act, Public Law 660) is operating effectively and . . . should be continued at least at the present level; and . . . if anything, the construction grants should be increased. . . . The Board (also) feels that it needs to be given a more important status in the Department of Health, Education and Welfare and recommends that prompt steps be taken to give it elevated status.”

Furthermore, a recent *Outdoor News Bulletin* from the Wildlife Management Institute reports that telephone companies are shaping a drive to abolish the tax. If successful, this would undercut the Joint Federal-State Action Committee’s proposal to hand the program over to the states.

MEETINGS: *National Wildlife Federation*, February 27-28, March 1, Sheraton McAlpin Hotel, New York City; *North American Wildlife Conference*, March 2-4, Statler Hotel, New York City; *Sixth Biennial Wilderness Conference*, March 20-21, Fairmont Hotel, San Francisco.

The Editor's



Bookshelf

THE OUTER BANKS OF NORTH CAROLINA, by David Stick. The University of North Carolina Press, Chapel Hill. 1958. 352 pages. Illustrated. \$6.

Between the brackish sounds off the North Carolina mainland and the salty, tempestuous Atlantic Ocean stretch 175 miles of long, low, narrow, sandy reefs known as the Outer Banks. Midway in this chain, Cape Hatteras juts far into the Ocean. Here the cold, turbulent Labrador Current sweeping down from the north collides with the warm Gulf Stream swinging up from the Gulf of Mexico to create one of the most devastating sea areas in the world—"the Graveyard of the Atlantic."

In spite of their isolation and the vagaries of wind, wave, and shifting sand, the Banks have experienced an amazing and exciting history for over four centuries. The ill-fated sixteenth-century settlement of Sir Walter Raleigh seemed to presage the struggles and suffering that lay ahead for successive generations who would have to cope with pirates, wars, and economic disasters.

Then in the midst of the depression in the 1930's was born the idea of a great national seashore park and of an outdoor historical drama "The Lost Colony," given at Roanoke Island. Tourists seeking the inspiration and recreation of the beaches and the drama did more economically for these islands than all the whales, fish, and cattle over the centuries. And with this first national seashore park, the National Park Service added a new type of area to its system.

The author, who grew up on the Banks, recounts all this and much more in this, his latest book. As would be expected in an isolated region such as the Banks, an extensive tradition of myth and legend developed. Resisting the temptation to exploit this, the author has done extensive research, and, sifting fact from fiction, presents his findings in easy-to-read, narrative style. Whereas legend contends that there were about 2000 shipwrecks off the Banks, Mr. Stick authenticates only 650. (Their stories he gave in detail in a previous book, *The Graveyard of the Atlantic*, published in 1952. Only one chapter in his present book is devoted to these disasters.) It is hoped that, with

his vast knowledge of the Banks, he will write a third volume giving the folklore of the region and more about the life and characteristics of its weather-beaten people, thus making what could well be a definitive trilogy of this small but interesting country.

The book contains several general regional maps and is illustrated by small line drawings. More detailed maps, photographs, and reproductions of historical prints would have enhanced the volume. Although not footnoted, the author does give reference and bibliographical notes on each chapter for readers who want to examine sources. The last 64-page chapter, "The Banks Today," serves as a tour guide. The book thus combines an excellent general introduction to the area with a detailed description of the country from the Virginia to the South Carolina lines. It is a fine example of regional history and is highly recommended to all who visit the North Carolina coast.—*B. Floyd Flickinger.*

KOEDOE. Published annually by the National Parks Board of Trustees, Pretoria, Union of South Africa. Volume I, 1958.

A recent addition to the ranks of journals devoted to scientific investigations in natural history has just arrived from South Africa under the name of *Koedoe* (in English usually written Kudu). On its cover is a portrait of the magnificent Kudu antelope for which it is named. Published by the National Parks Board of Trustees, Pretoria, Union of South Africa (equivalent of our National Park Service), its subtitle is *Journal for Scientific Research in the National Parks of the Union of South Africa.*

Opportunity for research in natural science is one of the important functions of national parks and natural areas. In America there has been some significant research in a few of our parks and in a good many of our wildlife refuges and other natural areas. However, we have made relatively little such use of our national parks compared with what has been done in some of the great parks abroad. The publications sponsored by our National Park Service and the vari-

ous natural history associations of the parks are mainly of a popular interpretive nature. This is a very important function and only to be encouraged. However, to have its fullest value, such interpretation must be based on serious study of the area under consideration.

Undoubtedly a bibliography of scientific papers based on studies in our national parks would show an impressive total amount of work. It would, however, probably not show many collections of articles comparable to the first number of *Koedoe*, nor would it show any serial publication sponsored by our National Park Service devoted to the results of investigations of the natural history of our parks. The National Parks Board of Trustees of the Union of South Africa is to be heartily congratulated on this latest outdoor science journal.

The first article is an historical account of the early explorations and descriptions of what is now the Kruger National Park. It is written in Afrikaans with a summary in English. (The journal is bilingual, with articles in either of the two principal languages of South Africa and summaries in the other.) Also in this number are accounts of mammals, reptiles, birds, and mosquitoes of some of the park areas. Three new species of *Acutitornus* Janse are described, but unfortunately no indication is given in the title of either what phylum this genus belongs to, or even whether it is a plant or animal. A clue is found in a reference included, strangely, in the key to the species. Inquiry, scarcely possible except in a large taxonomic center, shows it to be a moth of the family Gelechiidae.

Natural areas have perhaps their greatest long-term importance for ecological investigations. *Koedoe* shows a good start in this field with a vegetation map of the Kalahari Gemsbok National Park, an experimental study of veld burning with recommendations concerning the use of fire in veld management, and a paper on certain aspects of animal ecology relating to water economy of desert animals.

This first annual volume of *Koedoe* shows a fine start toward a productive

scientific program for South Africa's magnificent national park system. Subsequent volumes are awaited with much interest. One can only commend it to the attention of our own National Park Service. To balance some of the practical aspects of "Mission 66," we might even be able to afford something similar ourselves in the area of basic research.

—F. R. Fosberg.

ARCTIC WILD, by Lois Crisler. Harper and Brothers, New York. 1958. 301 pages. Illustrated. \$4.95.

This husband-wife wilderness and wild-life adventure story is one of the most absorbing and significant ever published. Lois and Herb Crisler spent a year and a half in Alaska's Brooks Range photographing wolves and caribou for Walt Disney's *White Wilderness*, now showing in cities and towns across the country.

There are two prominent aspects of the story. First the Crislers were faced with the problem of survival under completely wilderness conditions, new and unknown to them. The bush pilot who set them down returned only at intervals of several weeks. The Crislers well realized that should there be a mishap or illness, there was no way to obtain help. Three hundred miles northwest of Fairbanks, they were on their own, with only the supplies a small plane could carry.

Second they raised seven wolves to maturity at their wilderness home. Several weeks after the Crislers reached northern Alaska, Eskimos supplied them with two young wolves, a male and a female, taken from a den. When these were full grown, five more pups were obtained, and it was the Crislers' close contact with these animals, as well as their observation of the strictly wild wolves of the region, that revealed much about the characteristics of the species.

Mrs. Crisler's description of those friendly, intelligent animals should dispel much of the prejudice about them. How wolves show fear, affection, disapproval, playfulness, loyalty, jealousy, pleasure, and much more—all are brought out in this unusual story. The Crislers and the wolves even had song fests together; or would it be more accurate to say howl fests? Here is how the author describes such an incident:

"Man and wolves exchanged small comfortable sounds until the mood built up and all at once the wolves burst into a full-scale howl. Astonished and pleased, we glanced at each other and made a quartet of it." Speaking about the female. Mrs. Crisler says, "She must have had pleasure and sensitiveness about her song,

A Quick Glance at . . .

FORESTRY ACTIVITIES, A Guide for Boy Scout Leaders. Published by U.S. Department of Agriculture. December 1958. 31 pp.—Ideas for projects and a list of materials to help teach forest conservation. Available to teachers. Write U. S. Forest Service, Washington 25, D. C.

TEACHING CONSERVATION AND NATURAL SCIENCE IN THE OUTDOORS. Prepared by the California Association for Outdoor Education in cooperation with the Conservation Education section of the State Department of Natural Resources. 48 pp. Illustrated.—A handbook for teachers, camp leaders, counselors and youth leaders. Available from the Supervisor of Conservation Education, Department of Natural Resources, Office Building #1, Sacramento 14, Calif.

THE WATER POLLUTION CONTROL PROGRAM OF THE U.S. PUBLIC HEALTH SERVICE, 1957-1958. PHS Publication No. 631. 26 pp. 25¢.

SOURCE MATERIALS ON WATER POLLUTION CONTROL, July 1958. PHS Publication No. 243. 24 pp.

GOOD WATER MAKES GOOD NEIGHBORS, Program Ideas for Women's Clubs Groups. PHS Publication No. 626. 7 pp.—All three documents are obtainable from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

TEAMWORK ON THE POTOMAC, THE STORY OF WATER POLLUTION CONTROL, by the Interstate Commission on the Potomac River Basin. Washington, D. C. 1958. 68 pp. Illustrated.—A report on the 18-year history of the Potomac River Commission.

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for if I entered on her note she instantly shifted by a note or two: wolves avoid unison singing; they like chords."

Wild wolves frequently were seen, and the Crislers had the rare experience of watching them hunt caribou. On one occasion, a wolf was seen making rapid gains in the direction of a caribou calf that was following the migrating herd. As the Crislers watched, the calf would stop and look back, seemingly unaware of the danger. The calf appeared doomed either by lack of speed or by its seeming stupidity in turning around to watch the approaching wolf. "The crowning surprise" writes Mrs. Crisler ". . . was the speed of that calf . . . he had given the

wolves every advantage and then outrun them with ease, simply floated away from them when he got good and ready."

We need a wealth of data about our native mammals in order to carry on wildlife management, and biologists are constantly supplying new facts. But seldom are we privileged to have a glimpse into the minds of animals. Indeed, it is safe to say that few people have shown such appreciation and sensitivity toward creatures as have the Crislers. There has been too much written and said about wolves being vicious, ruthless killers. Read *Arctic Wild* and learn what the Crislers discovered about them.

—Devereux Butcher.



LETTERS TO THE EDITOR

Glacier Peak Protection

My copy of the January issue of the NATIONAL PARKS MAGAZINE has just arrived and I am very pleased with what I see. The new format is excellent, and, more important, the tenor of the contents is very much to my liking.

Most of all, I was pleased with Phil Hyde's fine color picture of Image Lake and Tenpeaks in the Northern Cascades. Having said this, however, I fear I must add a sour note.

The description of the picture reads as follows: "Image Lake and the region to the east of Glacier Peak in the Glacier Peak Wilderness Area of north-central Washington. This superb wilderness of glaciers, lakes and magnificent forests must be protected for the enjoyment of all Americans for all time." I appreciate and applaud the spirit and intention of the caption, but there seems a maximum of error in the statement.

In the first place, there is no "Glacier Peak Wilderness Area." One has been proposed by the Forest Service, but one has not been established, and progressively doubt is being raised that one will be. Protection, even of this kind, for this area does not yet exist.

Second, it should be noted that the particular spot pictured cannot be protected by a Wilderness Area under Forest Service regulations from the threats that now impend. Close by, the Bear Creek Mining Company, a subsidiary of Kennecott Copper, has staked extensive claims on low grade copper deposits. Not only is extensive mining contemplated, but a road to service such mining is contemplated. The Wilderness Area regulations would prove no obstacle to this.

Last, may I point out that the Association has already adopted a recommendation for the only policy by which this and the many other comparable spots in the Northern Cascades may be adequately protected—a national park. When created—if too much time is not allowed for the exploiters to carry on

their destruction—this will be, as many who have seen the area have said, "our greatest national park."

Grant McConnell
Associate Professor
Department of Political Science
The University of Chicago

• We proposed a study by the Forest Service and Park Service aimed at protecting the Northern Cascades as a national park. We appreciate Mr. McConnell's corrections.—*Editor.*

Clingman's Dome

It is with horror that I looked at your (February, 1959) Magazine with the picture of the proposed structure for Clingman's Dome. What has happened to Mission 66? The idea of buildings for the use of the public may be important, but why not blend them into the natural beauty—don't let them stick out.

Louise Mandelbaum
Yonkers, New York

I was appalled by the flashy design of the contemplated observation "tower" for Clingman's Dome. Having heard many disappointed tourists, not hikers, say "there is nothing to see" at the end of the steep walk that connects the tower site with the parking area, I favor a lookout tower. But one blending into the landscape, preserving its uniqueness, should be built instead of the mechanical monster shown. Let's keep streamlined designs out of the wilderness.

Kenneth Burley
Chicago, Illinois

The purpose of this letter is to express disappointment with the narrow scope of emphasis of the Association.

I am no lover of big government and I am quite aware of the shortcomings of governmental agencies and employees. I am not prepared to believe, however, that those employees are completely lacking in love of nature, completely devoid of good judgment and completely irresponsible. I infer that "my Association" is convinced that it alone stands in the way of the leveling of all mountains, the filling of all lakes and canyons and the paving of the whole resulting flat area with asphalt and concrete.

The top of Clingman's Dome, the highest spot in the Great Smoky Mountains National Park is a relatively small, clear, bare spot surrounded by rather short trees over which and through which you

can see nothing. There is no landscape for the tower to blend into. I don't think the tower is "flashy and conspicuous"; the ramp does not appear to me "massive"; I am inclined to agree with the Park Service that it is a "graceful, graded spiral." I think the usual fire towers are singularly homely and, in the spirit of your phillippic, would liken them to oil well derricks or mine hoists, more "mechanical" than which you can scarcely get! What do you mean "eccentric?" Is concentricity a great artistic virtue? Where are the "unbending concrete and steel verticals and blank surfaces?" What in heaven's name do you mean by "breaks the feeling of time, history, and tradition, and of the long ages of nature?"

I think I should like to stroll up that spiral on a pleasant fall afternoon, looking off in various directions as I began to be able to see over the treetops. I don't think I'd begrudge having to share the space along the long railing with many other people, some of whom would not have been able to climb the many flights of open ironwork stairs of a fire tower. I'd appreciate not having to elbow my way to a window along the 30-40 foot periphery of the fire tower instead of having perhaps 400 feet of railing to stand along.

We like wilderness and we don't want it destroyed or seriously reduced, but we think there's room for differences of judgment and for compromise.

W. P. Bebbington
Aiken, South Carolina.

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FOR YOUR CONVENIENCE classified advertising will now be carried in NATIONAL PARKS MAGAZINE. Take advantage of the opportunity to buy, sell, announce or seek out camps, guest ranches, resorts, camping equipment, guide services, camping companions, cameras, binoculars, books, tents, trailers, stoves, sleeping bags, and the like. Orders must be received a month before publication date.

An Answer to Fischer

Each person is entitled to his own opinions and may disagree with ideas and policies set forth by other people or organizations. However, he has no right to discredit such individuals or groups.

The Sierra Club, like many other conservation organizations, is dedicated to the preservation of our nation's scenic resources, its forests, waters, deserts, wildlife and wilderness. The new Tioga road is a direct violation of the basic National Park Act of 1916 to conserve the scenery unimpaired for the enjoyment of future generations. To accept such a park road policy the club would have to be blind to the very principles of national parks; yet, because of their criticizing and rejecting such a policy your January correspondent (see letter from Virgil Fischer in January 1959 issue) has considered the club as composed of crackpots.

Ralph W. Hubbs
San Bernardino, California

“. . . Cry and You Cry Alone”

What would your reaction be if you saw a beautiful woman, anticipated meeting her, and then discovered that all she did was complain incessantly and, in general, thought of nothing but how unfairly life was treating her? Wouldn't you think that such an attractive woman had much more to offer the world?

I have been a member of the National Parks Association for just a few months. Never having seen the NATIONAL PARKS MAGAZINE before joining, I could hardly wait for the first issue to arrive. Finally, the great day did arrive and I received the July-September 1958 issue with its beautiful colored photograph on the cover. With great anticipation I turned the pages. As I turned each page my heart sank a little lower. With few exceptions all the printed matter was about the battles the National Parks Association is fighting and losing. My feeling, by the time I reached the end of the magazine, was that in no time at all each and every one of our national parks would be a shambles, completely devastated, and unfit for the human eye to gaze upon.

I realize that the National Parks Association has a monumental task on its hands trying to keep commercial interests from horning in on the areas already under Federal jurisdiction.

But in addition to articles on the battles to preserve our parks, let us have articles and pictures on some of the parks and monuments under Federal jurisdiction that are no problem.

The national park system is quite extensive. The average American has no idea how vast it really is. Why not describe the different areas that make up the system? Give the history of such places as the Statue of Liberty, Kennesaw Mountain National Battlefield in Georgia, Castillo De San Marcos in Florida, and Cades Cove in the Smokies. I have been lucky enough to visit these spots but would never object to reliving these visits by reading about them in your magazine. Why not describe Whitman National Monument, Craters of the Moon National Monument, Capitol Reef National Monument? These are places I may never be fortunate enough to visit, but would love to know about.

Tell us and show us how wonderful all these places are and you will get more cooperation from the public when you want them to help you fight to preserve these areas because they will understand better just what they are fighting for!

In rereading what I have written above an old saying has suddenly come to mind, namely, "Laugh and the world laughs with you. Cry and you cry alone." A few more happy articles sprinkled between the unhappy ones would give the magazine such a lift.

Lillian G. Nielson
Teaneck, New Jersey

• We shall do our best to carry more articles on pleasant aspects of national parks. Manuscripts and photographs from experienced writers and photographers are welcome.—*Editor*.

Indiana Dunes

I noted the paragraph on the outside back cover of your October-December 1958 number headed "Now a Damsite." You included the dunes of Lake Michigan, and I infer you had in mind our effort to save the Indiana Dunes not yet occupied by homes or industry. I thank you for this, and I compliment you heartily on the contents of the magazine.

It has been my privilege to have met all the national park directors, including Mather. You very likely know that Mather presided at an all-day meeting in Chicago, October 1916, when it was proposed that the Indiana Dunes from Miller to Michigan City, extending about

twenty miles along the south shore of Lake Michigan, be made a national park.

R. M. Strong, Chairman
Conservation Council
Chicago, Illinois

Limp and Characterless?

Why did you change the size of NATIONAL PARKS MAGAZINE? I have saved the smaller size for years (they helped me plan a five-week trip to the west last year) and now this monstrosity. Until the smaller size is returned, into the waste basket they go. The new size is too large to go on a book shelf—standing up and so limp it has no character.

Charles T. Kurtz, Jr.
Clearfield, Pennsylvania

• We hope most of our readers will find more advantages than disadvantages to our new format. If they do not fit on our readers' bookshelves, we hope the issues may be passed on to friends, schools and libraries for their use.—*Editor*.

This is to express my great enthusiasm and appreciation for the new format and character of the NATIONAL PARKS MAGAZINE. Bravo! It is a most handsome job, and the cover photo is especially beautiful. I was so grateful to see this picture bespeaking the grandeur and inimitable value of the North Cascades region. Best wishes for all new developments with the magazine and its timely articles.

Cornelia Woodworth Ryder
Berkeley, California

NEW MEMBERSHIP RATES

Membership dues will be increased beginning April 1, 1959. The new rates will be: \$5 annual, \$8 supporting, \$15 sustaining, \$25 contributing, \$100 life with no further dues, and \$1000 patron with no further dues. The educational rate for school and library subscriptions will be \$4 a year. All dues, bequests and other contributions to the Association are deductible from your federal taxable income.

BACK COVER: The Elwha River and Mount Fitzhenry in Olympic National Park, Washington. National Park Concessions, Inc. Photo by W. Ray Scott. See Wanted: National Park Quality in Our Everyday Waters in this issue.

