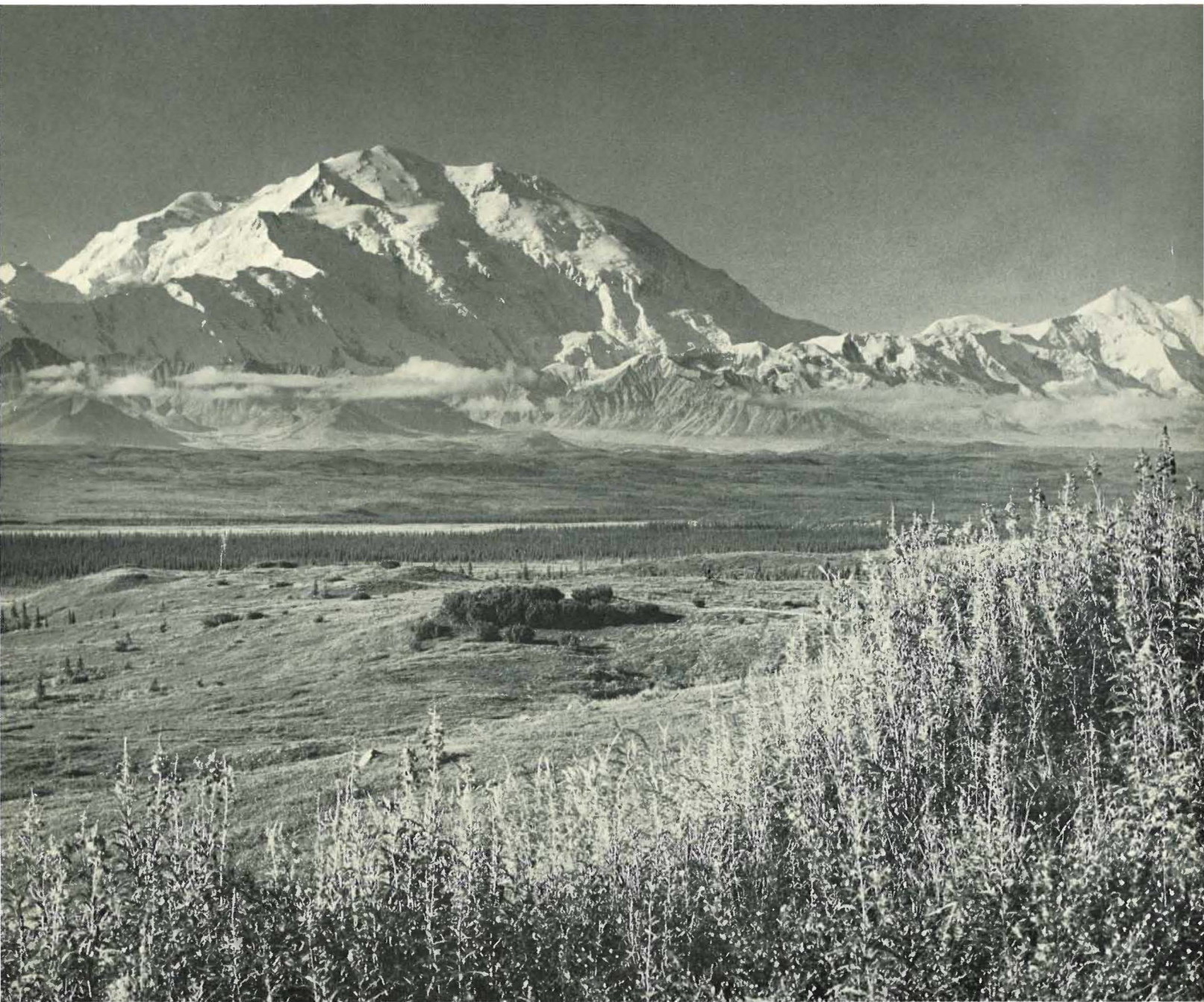


NATIONAL PARKS *Magazine*



Mount McKinley: Alaska

August 1961

The Editorial Page

Maneuver at Hetch Hetchy

WE GREET WITH MIXED feelings Interior Secretary Udall's approval of San Francisco's application to relocate the right-of-way for its hydropower tunnel aqueduct from Hetch Hetchy reservoir in Yosemite National Park.

It is gratifying that as a condition of approval stipulations have been obtained to maintain flows of water in the Tuolumne River which are apparently acceptable to the federal agencies involved. The grant of the former right-of-way under the Raker Act in 1914 contained no such guarantees.

This Association participated in the recent proceedings before the Special Hearing Officer wherein the question was raised whether the City had been sufficiently diligent in developing its power franchise, or whether, for want of diligence, the franchise should be forfeited. We pressed for forfeiture, but if the attack on the franchise has resulted in getting secure guarantees of water releases, the fight has in part been worth it.

The Raker Act provides merely that the Secretary may, in his discretion, seek a judgment of forfeiture for lack of diligence; he chose to approve the application, without passing on diligence. There can be no doubt about the long delay in development. The City contended that it tried, but that the voters refused to approve the necessary bond issue. This Association and others contended that the decision of the voters was the decision of the City.

The Secretary observed that our argument was compelling and that the City would have difficulty in maintaining its case if it were decided on the diligence issue. The City should be deeply appreciative of the generous help the Secretary gave it.

But the Secretary nonetheless reserved the question of diligence for the future. This reservation is of vital importance because the City claims additional water power sites in Yosemite Park and Stanislaus Forest, notably at Poopenaut Valley inside the Park boundary on Tuolumne River; at Lake Vernon inside the Park; for the enlargement of Eleanor Dam inside the Park; and at Lake Huckleberry in

Stanislaus Forest. Whether it develops these claims will depend, it seems, on whether it gets enough water from the Don Pedro Reservoir in the San Joaquin Valley.

The approval of the application was a sweeping concession to urban development claims in recreation and wilderness country. The decision to rest the matter on secretarial discretion eliminated any possibility of judicial review. Had the matter gone to court, as the Secretary said, San Francisco would have had a rough time proving its case. Conservationists need to give the developers a rougher time in such matters in the future. They should get ready at Poopenaut Valley and Lake Eleanor. Next time, the question of diligence should be tackled and settled. Not one more acre of Yosemite or Stanislaus should be sacrificed to the dam builders.

This is not just a matter of the parks. It is a question of the Supercities reaching up into the mountain, forest, and farm country to find water which they should get from other sources. Their power plants can use oil, gas and coal while the development of fission, fusion and sunpower is completed. For water supply, the cities need to clean up pollution in the nearby rivers and harbors, and get to work on desalination and distillation. A high standard of living in qualitative terms demands that the waters of the piedmonts and mountains be reserved for recreation, wildlife, agriculture, and scenery.

—A.W.S.

Capitulation at Yellowstone

NO ONE SHOULD BE fooled by the assertion in Acting Interior Secretary Carver's June announcement that the revised regulations on motorboating in Yellowstone Park reaffirm any principle of protection of park values.

Last winter, after public hearings, regulations were approved zoning the three southern arms of Yellowstone Lake, Shoshone Lake, and the Lewis River channel for hand-propelled watercraft only.

The reasons were well understood and thoroughly valid. Exploding motorboat traffic was destroying the quietude

and solitude of park lakes, and the noise and waves were endangering waterfowl nesting grounds on the shores. There are plenty of other places in America where motorboat enthusiasts can have a field day—the reservoirs behind the big dams, for example.

The original regulations left four-fifths of Yellowstone Lake for the motor maniacs. Not content with the biggest cut, however, they maintained a steady propaganda and political pressure, and for the moment have won a battle.

The southern arms of Yellowstone will be open again to motorboat traffic except for tiny areas at the tips. Theoretically, speeds will be limited to five miles an hour, but such rules are of doubtful enforceability, and are no help on the noise and stench. The permits and reports which will be required will be a bureaucratic nuisance. It was a work of supererogation to add restrictions on hand-propelled craft, keeping them within a quarter-mile offshore; genuine outdoorsmen want no such paternalistic protection.

We print in this issue the statement adopted on the question of motorboating by the trustees of this Association at the annual meeting this May. The statement notes that in a few cases, such as Everglades and Isle Royale, limited motorboat use may be necessary for visitor access. The revised regulations are announced with a fanfare about necessary access, as if there were no way to get into the arms of Yellowstone Lake without motorboats. If such a principle of access were to be accepted, most park waters would be defenseless.

The statement of the Association was framed in blissful ignorance of the pendency of the revised regulations. The statement looks toward the eventual elimination of motorboating on all park waters; in the light of these new pressures from commercial interests, a more sweeping campaign against motorboating in the parks should be launched forthwith.

The haste with which the revised regulations have been promulgated is almost embarrassing. Last winter's restrictions were imposed after protracted investigations, studies, hearings, and deliberations. The revised regu-

(Continued on page 19)

Officers of the Association

CLARENCE COTTAM, President
FRANK E. MASLAND, Vice-President
JOHN H. COVER, Secretary
DONALD A. MCCORMACK, Treasurer
ANTHONY WAYNE SMITH, Executive Secretary

Board of Trustees

HORACE M. ALBRIGHT, New York, N.Y.
HERBERT L. ALLEY, Tavernier, Florida
HAROLD E. ANTHONY, New York, N.Y.
RICHARD BORDEN, Concord, Massachusetts
GEORGE E. BREWER, JR., New York, N.Y.
ROBERT Z. BROWN, Colorado Springs, Colorado
*WILLARD E. BROWN, Washington, D.C.
CARL W. BUCHHEISTER, New York, N.Y.
DEVEREUX BUTCHER, Washington, D.C.
JAMES C. CHARLESWORTH, Philadelphia, Pa.
GRANT CONWAY, Brookmont, Maryland
ROBERT C. COOK, Washington, D.C.
HAROLD J. COOLIDGE, Washington, D.C.
*CLARENCE COTTAM, Sinton, Texas
*JOHN H. COVER, Washington, D.C.
RAYMOND B. COWLES, Santa Barbara, California
NEWTON B. DRURY, Berkeley, California
JOSHUA EVANS, JR., Washington, D.C.
S. HERBERT EVISON, Pittsburgh, Pennsylvania
B. FLOYD FLICKINGER, Baltimore, Maryland
IRA N. GABRIELSON, Washington, D.C.
LEONARD HALL, Caledonia, Missouri
WELDON F. HEALD, Tucson, Arizona
MICHAEL HUDORA, Washington, D.C.
DARWIN LAMBERT, Ely, Nevada
ETHEL L. LARSON, Manistec, Michigan
MARTIN LITTON, Menlo Park, California
*FRANK E. MASLAND, Carlisle, Pennsylvania
*DONALD A. MCCORMACK, Washington, D.C.
OLAUS J. MURIE, Moose, Wyoming
M. GRAHAM NETTING, Pittsburgh, Pennsylvania
SIGURD F. OLSON, Ely, Minnesota
JOHN OSSEWARD, Seattle, Washington
RICHARD H. POUCH, Pelham, N.Y.
SPENCER M. SMITH, JR., Washington, D.C.
*HUSTON THOMPSON, Washington, D.C.
WILLIAM P. WHARTON, Grotton, Massachusetts
T. HENRY WILSON, Lenoir, North Carolina
*CHARLES G. WOODBURY, Washington, D.C.
MRS. ROBERT C. WRIGHT, Haverford, Pennsylvania

* Executive Committee

Staff

PAUL M. TILDEN, Editor and Assistant to the Executive Secretary
RALPH H. DWAN, Counsel
KATHARINE W. BRYAN, Business Manager

Cooperating Organizations

Am. Association for Advancement of Science
Am. Committee for Internat'l Wildlife Protection
American Planning and Civic Association
American Society of Landscape Architects
American Society of Naturalists
British Columbia Natural Resources Conservation League
Desert Protective Council
Ecological Society of America
Federation of Western Outdoor Clubs
Garden Club of America
General Federation of Women's Clubs
Geological Society of America
Hellenic Society for Protection of Nature
International Union for Conservation
Izaak Walton League of America
National Audubon Society
National Campers and Hikers Association
National Council of State Garden Clubs
National Parks Association of Japan
National Speleological Society
National Wildlife Federation
New York Zoological Society
Olympic Park Associates
Save-the-Redwoods League
Sierra Club
The American Forestry Association
The Colorado Mountain Club
The Mountaineers
The Nature Conservancy
The Wilderness Society
Wildlife Management Institute

NATIONAL PARKS Magazine

OFFICIAL PUBLICATION OF THE NATIONAL PARKS ASSOCIATION

AUGUST 1961

Vol. 35, No. 167

Paul M. Tilden, Editor

CONTENTS

The Editorial Page	2
New Hope for the Nene	William W. Dunnire 4
Exploring the Past at Van Meter	Robert T. Bray 8
Historic Natural Scenes in the Southwest	Olaus J. Murie 11
A Rocky Mountain Pack Trip	Robert M. Hammond 13
Conservation News Briefs	15
Your Association at Work	16
The Editor's Bookshelf	18
The Conservation Docket	19

The Front and Back Cover Photographs

The front cover view of Mount McKinley, Alaska, was taken by Charles J. Ott, National Park Service employee of McKinley Park, who for many years has been recognized as one of the nation's outstanding nature and wildlife photographers. The back cover for the month is the photographic work of Weldon F. Heald, of Tucson, Arizona; it shows more than a vertical mile of solid granite in Kings Canyon National Park as seen from Mount Bago, looking over the canyon of East Creek to the lofty peaks of the Kings-Kern Divide.

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 permanently preserve 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.

Dues are \$5 annual, \$8 supporting, \$15 sustaining, \$25 contributing, \$150 life with no further dues, and \$1000 patron with no further dues. Contributions and bequests are also needed to help carry on this park protection work. Dues in excess of \$5 and contributions are deductible from your federal taxable income, and bequests are deductible for federal estate tax purposes. As an organization receiving such gifts, the Association is precluded by relevant laws and regulations from advocating or opposing legislation to any substantial extent; insofar as our authors may touch on legislation, they write as individuals. Send your check today, or write for further information, to National Parks Association, 1300 New Hampshire Ave., N.W., Washington 6, D.C.

National Parks Magazine is published monthly by the National Parks Association. Annual subscription, \$5 a year. School and library subscription \$4 a year. Individual copy 50 cents. Letters and contributed manuscripts and photographs should be addressed to the Editor, 1300 New Hampshire Avenue, N.W., Washington 6, D.C. The National Parks Association is not responsible for loss or injury to manuscripts and photographs in transit. Return postage should accompany contributions. Copyright, 1961, by the National Parks Association. Title Registered U.S. Patent Office. Indexed in the *Reader's Guide to Periodical Literature*. Printed in the U.S.A. Second-class postage paid at Washington, D.C.



The Nene, or native Hawaiian goose (above) is a species that has for some years been in great danger of extinction. Indiscriminate hunting, conversion of habitat to agricultural uses, and competition of exotic animal species had, by the third decade of the twentieth century, reduced Nene numbers to less than fifty wild birds. Since 1958, Hawaiian governmental authorities—with assistance from the U. S. Fish and Wildlife Service—have prosecuted a program for the restoration of the handsome bird. At right, the photograph shows a "kipuka," or island of vegetation, in a lava flow of Mauna Loa, habitat for nesting Nene.



New Hope for the Nene

By William W. Dunmire

UP ON THE MIDDLE SLOPES OF MAUNA LOA Volcano in Hawaii Volcanoes National Park, there is some country that strongly belies the usual concept of Hawaii. It is an area that gives the impression of being arid. There are barren expanses of black lava interspersed with dry brush thickets and an occasional clump of gray-green koa trees, yet the dry appearance is not the result of a lack of rainfall, for annual precipitation averages around fifty inches. Here, rather, is new land, formed in recent times by the great eruptions of lava from Mauna Loa; and some of it dates within the past century. This is the "Mauna Loa Strip" of Hawaii Volcanoes National Park, elevation between 5,500 and 7,000 feet, the present breeding grounds of one of the rarest birds in the world—Hawaii's native goose, the Nene.

If the association of a goose with barren lava sounds incongruous, consider that the Nene—pronounced *nay-nay*—is probably the strangest goose in the world. It has entirely dispensed with the need for open water during any time of its life, the only living goose to have done so. Instead of residing on some pond or marsh (these are practically non-existent in Hawaii) the Nene spends most of its life on or near fresh *aa* lava, the type of flow that presents a hopelessly jumbled surface. The birds often rest on *aa* prominences during the day. At other times, they forage for berries and greens alongside the flows; they will hide among the lava blocks when frightened; and they nest and rear their young on islands of vegetation surrounded by the flows.

When *aa* lava is fresh, its extremely sharp, ragged edges make it a nightmare to cross, even for a well-booted human pedestrian; but to a Nene the chaotic surface is no problem at all. These big birds do very well walking

or even running along the flows. In fact, they must have renounced the more normal mode of goose travel at an early age in their evolutionary development, for the webbing between their toes is now reduced to about half that of other geese.

The nesting habits of the Nene nicely illustrate the theory that lava takes the place of water in the activities of the Hawaiian geese. In mid-autumn, birds that may have spent the summer months in flocks on the other side of the island begin to arrive at their breeding grounds on the slopes of Mauna Loa. Breeding adults—birds at least two years old—pair up and establish nesting territories; the juveniles, which exactly resemble their parents but are not sexually mature, either tag along with the adults or else form small groups of their own.

An important factor in selection of breeding territory is the location of a *kipuka*, which is an island of older lava surrounded by more recent flows. Because of their greater relative age, a thin soil usually has developed, and *kipukas* tend to support varied plant life, which stands in bold relief among the flows. On Mauna Loa, these patches of vegetation may stretch from a few square yards to many acres in extent, and Nene pairs invariably choose such places to raise their families. This custom is certainly comparable to the habits of many other waterfowl that locate their nests on emergent vegetation in ponds or marshes. Here the *aa* lava seems to be a perfect substitute for the water.

At some time between November and January a nest site is chosen at the base of a scrubby bush, where the

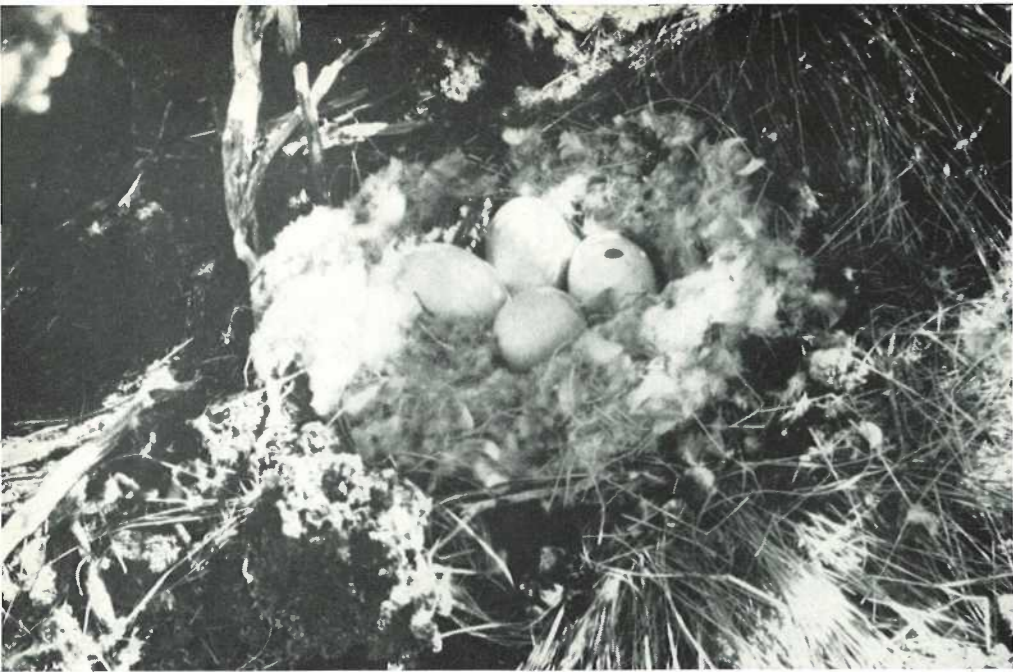
William Dunmire, author of the recently published *Birds of the National Parks in Hawaii*, is park naturalist at the newly named Hawaii Volcanoes National Park.

goose scoops out a shallow depression and then lays a single egg. She often covers the egg quite scantily with a mere blade or two of grass, then leaves the nest to go about her business in the immediate area. Two days later the process is repeated, and she continues to lay one egg every other day, vacating the nest between times, until the clutch totals two to five eggs. On the day that the next to last egg is laid, the goose finally starts incubation.

Mechanism for Hatching

This schedule provides a mechanism whereby all the eggs in a clutch will hatch about the same time, since the first eggs cool off to air temperature and so do not begin to develop until they are rewarmed by the incubating goose. At that time the nest itself is built from whatever sticks and twigs are within immediate reach. The material is lined with down plucked from her breast, and it is placed around the eggs. From that time on, whenever the goose leaves the nest for short foraging trips, she thoroughly covers the eggs with sticks and leaves, and the site is so well camouflaged that few wild nests have ever been seen by man. During this period the gander guards the site from some nearby rock, but never participates in incubation.

The goslings hatch about a month later, and soon are able to follow the parents as they search about the flows for greens and berries. Two favorite foods are *ohelo*, a Hawaiian relative of the huckleberry, and another berry, *kukaenene* (literally, "Nene feces," so named because of its purplish dye that blackens the droppings of any birds that have dined on its fruit.) But with bare lava comprising such a high proportion of the breeding environment, food is not always plentiful, a fact that probably explains why there is not likely to be more than a single breed-



At left: nest of the Nene is constructed of twigs and leaves in a shallow depression, and is lined with down as soon as the next-to-last egg is laid.

Below: a three-week-old gosling, one of thirty-two raised in captivity during the past spring under the Nene restoration program, will be released at a future date to join its wild comrades.

All photographs National Park Service, by William W. Dunmire

ing pair of Nene located in any one *kipuka*. Thus the birds are spread out over a fairly large territory during the nesting season.

Nene tend to be extremely cautious during the season when their young are about, for by this time the adults have begun to moult and for five weeks are completely flightless. They move stealthily among the flows, their black and cream-colored markings blending almost perfectly with the dark rock that is often mantled with a patchwork of light gray lichen. And so they are rarely observed during these few weeks.

Later in spring, when both adults and young can fly, one or more birds will assume a lookout position on top of a lava prominence during the day while others feed nearby. The silhouette of such sentry birds can easily be spotted a half-mile or more away; but if the geese are approached, they will all move out on the lava to observe the intruder from a high point. They are astonishingly tame—too much so for their own good—and will usually allow a man to approach within twenty or thirty feet before taking to the air. If the observer does not approach too closely, the birds will patiently watch him from their lava perch until he leaves. The author was once kept under surveillance for more than an hour while waiting to photograph a pair of birds that plainly did not intend to change position. During that time they remained practically motionless, but they continually uttered creaky alarm notes.



Nene, scientifically named *Branta sandvicensis*, are considered to have evolved from the same basic stock as Canada Geese. Long before the Polynesians reached Hawaii a pair of birds must have accidentally arrived on the islands, possibly blown in over the sea during a storm. Over the millennia the birds lost their instinct for migration, and today, although they are strong, capable fliers, they do not even travel from one island to another. Fortunately, their established home is on the largest island of the Hawaiian archipelago where there is still suitable

habitat not transformed by man.

Not many years ago Nene were plentiful, and may have numbered 25,000 or more in the latter part of the eighteenth century. In 1823, William Ellis, a missionary, reported vast flocks in the interior of Hawaii; but by 1900 a great decline had already occurred. The low point seems to have been reached during the thirties, when less than fifty wild birds remained. This dangerously low population level has continued about the same since then. Clearly the Nene has been on the verge of extinction for many years, and the slightest

upset in the present delicate balance could finish off the remnant wild population.

There is no question that man is to blame for the Nene's unhappy plight. The Polynesians, arriving there more than 1500 years ago, probably had only a minor effect on the geese, although we know that Nene were domesticated by these people in the early days. On the other hand, the white man, with his disrupting accomplices—the dog, the rat, the mongoose, and others—had a devastating effect. Conversion of much of the lowland to sugar cane and other agriculture restricted Nene range, while indiscriminate hunting further reduced their numbers. Time seemed to be running out for the survivors.

Probably the only reasons why the decline has leveled off during the past thirty years are that Nene-hunting became illegal and the remaining birds lived far from the usual haunts of man. But more positive assistance was obviously needed if the birds were ever to stage a real comeback. After a false start in the forties, the Territory (now State) of Hawaii, aided by United States Fish and Wildlife Service funds, began a full-fledged Nene restoration program in 1958. Mr. David Woodside was appointed Nene Ecologist, and his job was to learn as much as possible about the birds in the wild. Woodside has been able to capture a few wild birds for banding during their flightless period each spring. He now has eleven of the wild stock marked with colored leg bands that can be identified

from a distance, and he has learned a great deal about the habits of individual birds.

Building the Population

In coordination with the ecological studies, Nene have been raised in captivity with the intention of releasing them to mix with the wild birds on Mauna Loa. At first, the domestic rearing project was beset with problems. For example, the few female Nene in captivity could produce only a limited number of young each year. However, it was learned that if the eggs were removed from a female as soon as laid and placed in the care of a Muscovy duck, the Nene would soon lay a second or even third clutch, thus increasing the productivity of each goose. Muscovies have proven fairly capable foster-mothers, but the latest method entails hatching the eggs in an incubator. Success of the breeding program is attested by the statistics of Nene chicks produced: two in 1950, increasing annually since then to thirty-two this spring. More than a hundred birds have been raised.

The first Nene release was made in March, 1960. Twenty birds, most of them a year old, were liberated in a one-acre roofless enclosure pen within a Nene sanctuary on Mauna Loa, adjacent to Hawaii Volcanoes National Park. Since March is the beginning of the moulting period, the birds were confined by a six-foot chicken-wire fence until they grew new flight feathers. Native plant food in the pen was sup-

plemented daily with domestic water-fowl rations; otherwise the birds were left strictly alone. The idea was to encourage the geese to remain in the area as long as they would stay of their own volition, thus allowing them to become familiar with natural Nene environment. It seems to have worked remarkably well, for although the geese left the enclosure soon after they were able to fly, they continued to live in the immediate vicinity and occasionally mixed with nearby wild flocks. Almost a year later, nineteen of the twenty released birds were still accounted for in the area.

Mr. Woodside is now optimistic about the future of the Nene. He realizes that although there is little chance to improve the habitat for the birds, since the pig, rat, and mongoose seem destined to remain as permanent intruders in Hawaii, there is every reason to hope that the human relationship is changing from a negative to a positive factor. Residents are becoming aware of their State bird, and public education is playing an increasingly important role. Twenty more domestically-reared birds are being released on Mauna Loa this year, and future releases are planned for other parts of the island.

The Nene will certainly continue for many years to be one of the rarest birds in the world; but some day, it is hoped, this marvelous goose will again be a common sight among the lava flows—a wonderful complement to the volcanoes of Hawaii. ■

A pair of wild Nene are perched typically, below, as lookouts on a ridge of aa lava.



Exploring the Past at Van Meter State Park

By Robert T. Bray

WHEN THE SUBJECT OF ARCHEOLOGY is mentioned, the man in the street usually thinks of dynastic Egypt and King Tut's tomb; of the discovery of fabled Troy; or of the temples of the Maya and Inca in the New World. These are, of course, among the classics of romantic archeology. Far fewer are those persons who could call the names of very many of the more obscure, although colorful, tribes of North American Indians.

One such tribe was known as the "Missouri," a name now perpetuated in history by a great State and river. Although the Missouri are now gone as a tribal entity, a few places are known where they once lived. One of them was in and near the present Van

Meter State Park near Miami, Missouri.

At the University of Missouri's unique archeological research and interpretive center, established in Van Meter park in 1959, a whopping 6486 people, in 1960, learned something about the Missouri Indians and about the purpose, method, and results of "down to earth" archeology. If they found it less impressive than the pyramid of Cheops or the Temple of the Sun, they also found it surprisingly interesting and far more accessible than these. For here, in the center of the nation on the great Missouri River, lies a most impressive concentration of remains of the Missouri tribe.

Also at Van Meter is one of the largest and best preserved earthworks

of the prehistoric Hopewell Indians. At least a dozen large burial mounds are in the park, and evidence has been found to indicate that Indians hunted in the vicinity as long ago as 8000 years.

For a considerable number of years, the area in and near what is now Van Meter State Park, in northwest Saline County, has been a "happy hunting ground" for the fanciers of Indian relics. Dozens of people, experienced in their avocations, know the area as one of the very best producers of arrowheads, beads, pottery, and other artifacts of the Indian. Many others, more casual and less observant, have been occasional "rock hunters." Archeologists, too—trained people who are interested in Indian remains

as a means to the reconstruction of primitive societies—have known the fields and hilltops near Van Meter for many years. Careful research and some scientific excavations during the years have enabled them to identify the remains as those of the Missouri tribe and to tell the period (Ca. 1670-1730) during which the great Missouri village flourished.

The Missouri is one of many Indian tribes, now extinct as units, which played more or less important roles in the early maneuverings of the colonial powers of Europe for control of the hinterlands of America. The Missouri, in this locality, carried on their life-ways, their religion, ceremonies, and hunting and farming for many years until they were completely submerged in the tides of history after the coming of the white man. And all this without anyone bothering to record even the simplest facts concerning them as people.

Imagine, then, the challenge to archeologists of the extensive remains of the Missouri village at Van Meter. What could have been more pleasing

to them than the agreement, concluded during the summer of 1959, between the State Park Board and the University of Missouri which allowed the latter to establish and operate, in the park, a permanent center for research, student training, and public interpretation in archeology? The National Park Service, too, had a hand in long-term development plans for the park as a whole when Van Meter was selected, in 1959, as one of the few State parks in the nation to figure in a pilot project for the drawing up of a state park Master Plan Handbook, with nationwide applicability.

Providing for Everyone

From a very humble beginning in 1959, the Van Meter Center has already come a long way toward realizing the ultimate goal of an adequate arrangement for students, researchers, and visitors to the State Park. Two regular summer field schools of the University have already been held there, not counting the 1961 school.

Visitors to Van Meter Park during the summer months may see archeolo-

gists in action and enjoy "on the spot" interpretation, as well as a number of special interpretive displays. Among the more interesting and provocative questions they ask is "How do you dig—just shovel it out?" The shovel is an important tool of the Midwestern archeologist, but is ordinarily used only to shovel away dirt that has already been carefully searched for artifacts. In point of fact, the archeologist may employ literally scores of tools, which range in complexity from an orange-wood stick for excavating fragile bone, to an atomic "counter" used in radio-carbon (C¹⁴) dating of organic remains. To answer the question more completely, however, let us review a few of the most important activities of a beginning student at the field school at Van Meter.

A prospective archeologist is expected to have, or to be working toward, a regular four-year college degree, preferably in anthropology, the science of man. A good background in liberal arts and natural science is important to the student's development of a sound approach to the field. He is

Research Center Collections



In the photograph at the left, Van Meter State Park visitors watch archeologists at work and learn at firsthand about the colorful Indians who inhabited the vicinity during earlier times.

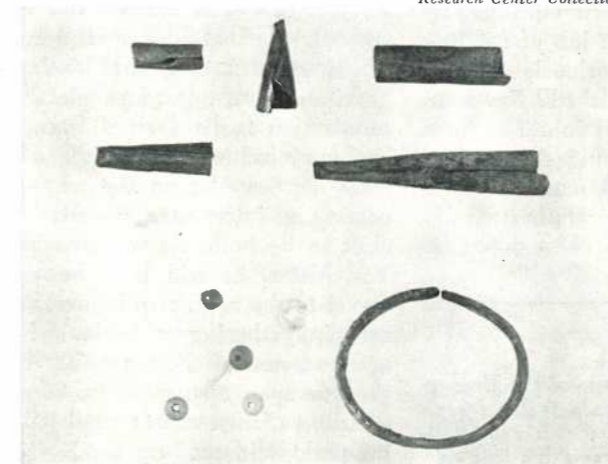
Below: a pottery vessel, now in the University of Missouri Anthropological Collections, was fashioned by a craftsman of the Missouri tribe.

U. M. Anthropological Collections



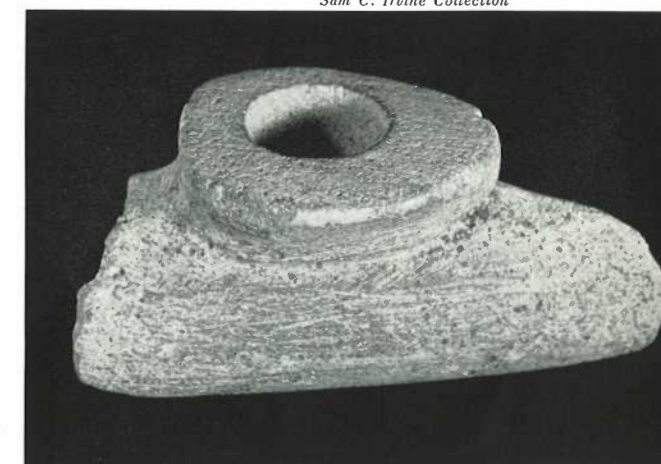
Among the European trade goods that have been unearthed at the Van Meter State Park archeological site are the copper beads, spangles, and glass beads now in the Research Center Collections.

Research Center Collections



The stone tobacco pipe below, in the Sam C. Irvine Collection, was carved out for the use of important Missouri men. This tribe no longer exists as a unit.

Sam C. Irvine Collection





Research Center Collections

Prospective archeologists or archeologist interpreters at Van Meter Park work carefully with spade, trowel, knife, brush and stick, and keep accurate records of the finds, which are plotted and photographed before removal from sites.

first shown how to locate and evaluate ancient sites, and how to record the information correctly both in his field notes and on some standardized map, such as a county road map or Geological Survey topographic map. This often involves much walking, and the development, over a time, of an extraordinary eye for recognizing what apparently "isn't there." Many Indian remains are far from obvious from a preliminary examination, and the student who can rapidly develop the knack of seeing elusive clues and appraising their meaning is indeed at an advantage.

After a site has been selected for excavation (and this is sometimes a problem in itself) a chief concern is the accurate recording of excavation data. The depth beneath the surface of an object is particularly important in helping to date it. The deeper it occurs, the older it is. There are a number of ways to record this kind of information, but that most commonly used is a system of five-foot squares, resembling a checkerboard, surveyed and plotted on the ground and on paper to form a grid over the area to be worked. Components of such a grid are numbered in such a way that extensions may be made logically in any direction without upsetting the system.

Excavations proceed slowly and carefully with the use of trowels, resilient "dirt flipper" knives, soft brushes, whisk brooms, and soft

wooden sticks. Soil is sifted to recover tiny objects missed in the excavations. All significant finds are carefully plotted and photographed before removal from the ground. Information is usually recorded with reference to a six-inch-deep excavation unit called a "level." The excavation may go deeper if there is evidence of ancient occupancy. This may occasionally mean digging for six feet or more.

The "bits and pieces" of history that the student gathers and so carefully records in this way may be surprisingly varied and quite numerous. If he is excavating at the Missouri Indian site, he may spend two or more weeks in working out a single five-foot square. When he is finished he will have five or six pages of notes and drawings, perhaps several photographs, and ten to twelve large bags containing the finds. In addition, he will probably have the job of refilling the hole he has so laboriously opened!

Is his work now finished? Far from it. Now comes the real job. The finds must be washed, identified, repaired or restored, numbered, cataloged, and interpreted. The interpretation usually

Robert T. Bray is director of the University of Missouri's archeological research and interpretive center, which was established at Van Meter State Park in 1959.

takes the form of a written report on the finds. This must be as scientifically precise and complete as possible. His field drawings of man-made features discovered during excavation must be plotted on paper, and integrated with those found by other students. This is done because of the possibility of establishing over-all patterns which might tell, for example, that here was the floor of an Indian house, or there a grain storage pit. These reports then must serve as the exact source of information upon which popular presentation—that is, park interpretation—is based.

After a few weeks it will be found that the great number of seemingly meaningless and incongruous things that have been learned will begin to fit together and make sense. By this time the student may have decided whether or not he really wants to pursue advanced studies and become a practicing archeologist. If his interests gravitate more toward people and the satisfaction to be derived from living explanations of otherwise obscure facts, he may be on the way to becoming an interpreter. Rarely, he may elect to be both. After one season at Van Meter, he will have been introduced to the rigid requirements necessary in gathering archeological facts, and to some of the ways that can be used to open up new vistas of understanding of these facts on the part of the park visitors. ■

Historic Natural Scenes in the Southwest

By Olaus J. Murie



All photos, National Park Service

Moved by the power of imagination, intelligent peoples all over the world preserve the relics of former civilizations, like those of Bandelier National Monument in New Mexico, above. The author feels that the necessary buildings at Bandelier (photo at left) as well as the service facilities, are simple and in harmony with the landscape.

AS I SIT HERE ON A ROCK, HIGH on the hillside, and look around at the landscape, I wonder what it is all about. Why do we designate all this country within my view as the Bandelier National Monument, a dedicated piece of land in New Mexico? Behind me are the steep cliffs up toward the north, all spotted with numerous holes; some small, some large enough to be called caves, in great disarray. Some of them are large, at one time made into dwellings and lived in by the Indians.

Of course the human historic aspect of this place caught our imagination and we had the urge to preserve it. All over the world we have had this same impulse to preserve ruins of all kinds, to build statues and memorials. We have been interested in the past,

and especially in the warlike incidents.

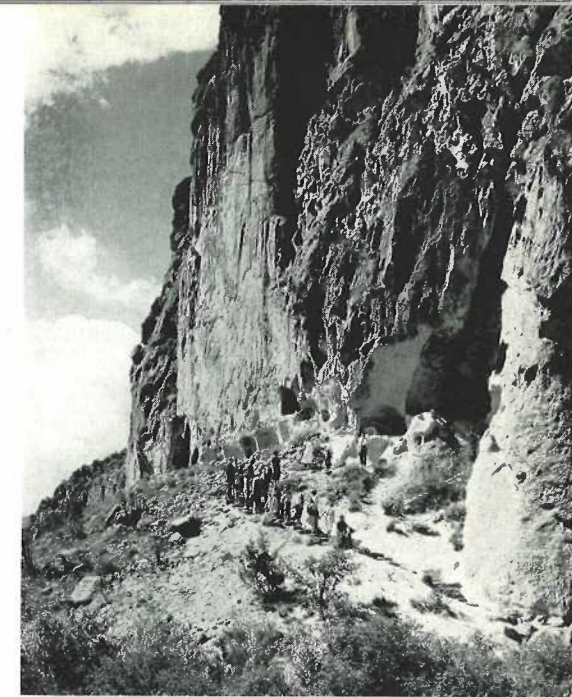
But I wonder. Do we put all our interest only in these ruins, the caves along those cliffs? We know that people lived in them years ago. But do we think far enough? How did those people live? They didn't spend all of their time in those caves. Didn't they have thoughts about this canyon reaching up there northward, the towering yellow pines on the slopes, the smaller junipers, even the green and yellow lichens such as these on the huge rock on which I am here perched?

As I sit here, a raven is calling over there across the canyon. The Indians knew the raven, and had stories about this avian character. Now, in the distance, comes the call of the mourning dove. After all, this is the country the Indians lived in—the cliffs, the stream

bottom where oaks, cottonwoods and the other valley-seeking trees lived, the birds, the deer, the fox, the ringtail, the Abert squirrel—all of these and many more. All of these are part of the earth's action producing the environment which shaped the lives of those early Indians.

We have the same opportunity today. We are people, too, interested in the world we live in. As I look up the cliffs I realize that geologic and climatic forces have sculptured this landscape, the pitted cliffs, and this boulder-strewn slope. The trees and smaller plants, including some cacti, have become adapted to this climate, as were the early Indians.

One day in spring, Mardy and I walked down the canyon stream, to where it joined the Rio Grande. We



enjoyed this, both ways. There were rapids and falls in the little stream, and all the plants were putting out their new leaves, making a mist of green over the slopes beside the water. We strolled along the banks of the wide Rio Grande. Another day we hiked up the canyon, along the river. Always we saw deer, and the large squirrels, and birds. What a place here for the ancient Indians to live; and for us, in this late day, to visit and roam in, to admire and try to understand.

As I look out over this country now and contemplate its history, the history of those early people, as related in the excellent little booklet furnished by the Park Service, I am thinking of what such a place can mean to us in the future. More than ever I think less of the categories concocted by human thought—"national monument," "national park," "wilderness area," and the like. Such places are pieces of original America. We have reached the stage in civilization where the earth we live in should mean more than ever before. Through the ages man has destroyed and devastated large areas, and the process is still going on. The Indians who lived in these cliffs so long ago lived close to nature. They had ceremonies, made pictographs and petroglyphs, certainly had acquired artistic ability. We do not know all about their mental attributes, but we do have an opportunity and a cosmic responsibility, to benefit from their culture; to carry our own to greater heights.

It is with this in mind that I have viewed with satisfaction the details of administration of this Monument. Here is a place where we felt good, felt at home. The buildings are not flamboyant; they are simple, and for that reason harmonize with the landscape. There is a minimum of road signs, only a few necessary ones. I have been particularly impressed with the gasoline service station here, with only a modest sign in the front of one building, "Gasoline," where you can drive behind something and fill your car's tank. The museum is modest, and here you can get what literature you want—all appropriate to the region.

In other words, man-made structures here give you the feeling of modesty, so necessary for us in these modern times. Nature and history permeate the place; they are permitted to be truly the dominant feature. I feel that here are not merely cliff dwellings to capture the attention of the casual tourist, but an opportunity to live and feel the whole environment in which the Indians lived.

Visiting Other Areas

On another long trip into the Southwest, several of us had a chance to see briefly several other places of great interest within the National Park System. We had a glimpse of the dramatic forms of Arches National Monument. We had a visit in Mesa Verde National Park, when the landscape was blanketed with snow and the sheltered cliff dwellings stood out dramatically

against the white backdrop. Here we had discussions of early human living, and heard wholesome views on how these areas which belong to us all should be administered.

Later we were in Chiricahua National Monument and enjoyed the surprising variety of forest growth so close to the broad desert. On the same trip, we were impressed with the authenticity of Coronado National Memorial, where we went up on a high point and looked out over a land apparently much as it was when Coronado first passed through. A few days later we visited Montezuma's Castle, that high cliff abode, set off by a lively stream below, where the sycamores and other characteristic growth made the whole setting complete.

From our visit in these areas in the Southwest, a very brief glimpse in some of them, we were impressed with several things. In the first place, the administrators seemed imbued with the thought that the main purpose of these places was to preserve something precious. The man-made structures were kept to a minimum. There was no talk of great numbers of visitors, no thought of "mass recreation" as an end, no advertising. Part of this, I am convinced, is due to the ideals and motivation of the administrators in charge. Furthermore, some of the superintendents of these places had been there long enough to know intimately and feel the spirit of the place. This is, I feel, an important point to be kept in mind by those distant offices.

Another thing that pleased me in these areas and in some others of the National Park System, was an appeal to visitors in leaflets sponsored by the local natural history organizations. In effect the visitor was advised that if he wanted to help to preserve the values of our land, he could join some civilian conservation society. Such admonition, distributed in various national park museums, helps to narrow the great gap existing too often between government and people.

Bandelier, where we became more intimately familiar with all its aspects, may be typical of those monuments we had the privilege of visiting. There it seemed that quality came first, and Nature had a chance to dominate the scene, and to appeal to the best in human nature. ■



The Hammond party, with pack horses and wrangler, starts over the Continental Divide in Rocky Mountain Park.

A Rocky Mountain Pack Trip

By Robert M. Hammond

Photographs by the Author

SHIVERING WITH EXCITEMENT, her eyes pleading her excuses, Hazel Hammond, age six, shoves back her chair. She leaves steaming bacon and eggs behind her at the cook-shack. It is the last food she will see for ten hours, but she has gone to more important things.

Her yellow squaw boots flying over dusty earth, red hat down her back, she races for the stables where she joins her brother Gary, age nine. Gary and the horses are looking each other over. A small tower of indecision, he picks by color, palomino gold, and a fast friendship begins.

Our family of six is at Glacier Basin Stables in Rocky Mountain National Park near Denver, Colorado. We are starting a long-dreamed-of adventure, a mountain pack trip.

Horses have been named and re-named for six weeks—Grass-stain, Meatball, Haystack. These noble names are discarded for Kay Lady, Troy, Rule and J. R., actual names. The horses answer just as well to these names as to the others—which is not at all.

At last Hunter Griffith, our guide and wrangler, approves the final knot of the diamond hitch on the second pack horse, and we mount. By "we" I mean my wife and myself; the four kids have been mounted since 6:30, riding around the corral.

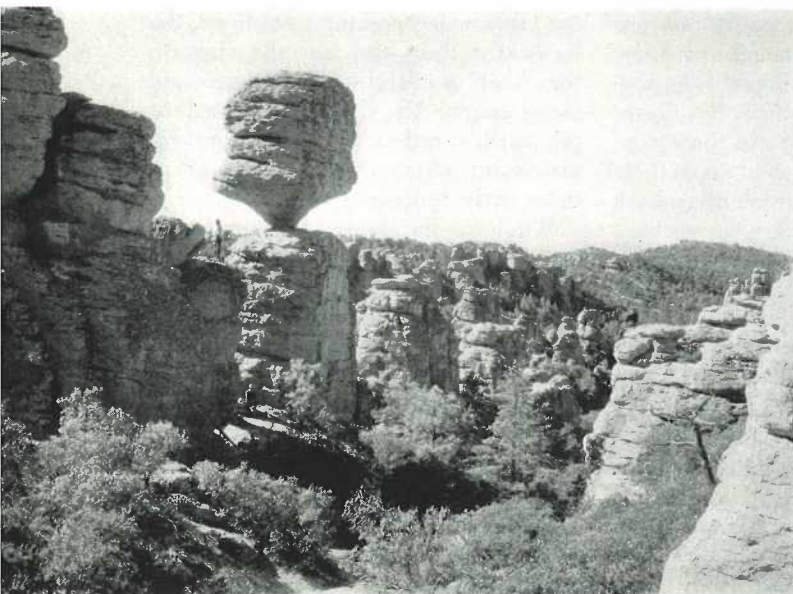
The children chatter and vie for position as we head single-file for Bear Lake. They quiet down as we move past Dream and Emerald Lakes, headed for Flattop Mountain—elevation 12,300 feet—and beyond. We pass wild raspberries, and up through ponderosa pines to lodgepole aspen. By 10 a.m., we are switching slowly back and forth across the face of Flattop.

Past barebacked, sweated hikers, their warm jackets tied at the waist against the winds of Flattop; on and up into spruce, fir and wind timber to timberline. In this world without wood, we switch back constantly to gain the mountain. Trained trail horses give us the benefit of their skill and strength. Up, now, over Nosebleed Ridge into Arctic tundra, the trail marked by stone cairns.

Orange-centered purple daisies (tansy aster) spread thickly over stark stone. Mossy rocks nestle now in a profusion of wildflowers with which nature softens what she has done to this part of the world. Black-eyed susans and daisies of all kinds and colors abound.

Hunter says that when this mountain was made, they were almost out of material. Our trail crosses a jumble of rocks piled like jackstraws. Each winter the ice loosens one or two at the bottom, and the mass is rearranged.

Crossing Flattop, we descend through blue, long-spurred



"Later, we were in Chiricahua National Monument and enjoyed the surprising variety of forest growth so close to the broad desert . . ."

«



The camp is set up at Elk Meadow, in the High Rockies, where darkness comes early, and where trail-weary riders are ready to call it a day.

columbine (the State flower), snow buttercups, forget-me-nots and Indian paintbrush. These steep-sided meadows stand as they must in Switzerland. Short-seasoned flowers pack a year's strength into a month's bloom.

Lunch has, somehow, been left out. It is 2 p.m., and Hazel, aged six, is both tired and hungry. With a ten minute rest, she perks up for the last two hours of the ride. At this stop, we think it is the hardest to get off the horses until we try to get back on.

On the final approach to Elk Meadow, we leave the main trail and break our way through three miles of raw bush. The young pack mare falls badly in a bog. We wait, fearful that she has broken the leg doubled under her. Unwilling or unable to get up of her own accord, she is

The four Hammond children—Amy, Jean, Hazel, and Gary, from left to right—exhibit a morning's catch of trout at Elk Meadow campsite.



forced to rise as Hunter "tails" her, literally lifting so hard on her tail that the animal struggles to her feet.

At long last, the grassy meadow and dismounting. The thing we have waited eight hours to do we can hardly do at all—stand up. My wife and I get our ground-legs while the children, bless them, ask Hunter if it will be all right to ride around the meadow for a while. It is, and they do, while camp is set up.

Dark comes early, deep in mountain meadows. There is just time to set tents and catch trout for supper before the sun sinks, and with it the temperature, by some twenty to forty degrees. Sore and tired, snuggled down in sleeping bags and tent, we listen to the water and the woods.

Dawn of a New Day

Early to bed is early to rise, and 6 a.m. finds the camp awake. Hunter has slept near the picket line and is now splitting pitch-pine for the warming fire. Cold fingers fumble with cold boots and, after a welcome cup of cowboy coffee (strong and black) the day's fishing begins.

Gary is at the picket line in wet boots, headed for a morning ride. Hazel has forgotten her numbing exhaustion, and comes down through the wet grass to help Daddy fish. Fortunately, these cutthroat are obliging and strike hard for Hazel. She proudly carries her first caught trout up to Hunter, her newest love, for breakfast.

The hot August sun burns the fog from the meadow. The trout don't know when to quit, but the tired fisherman does. The children would rather ride than fish, and Hunter agrees.

Lunch (trout) and then a summer storm soaks the meadow. We "nap it out" for two hours while Gary stays under the tarpaulin with Hunter. The rain over, we come out to a brilliant summer afternoon. Dusk, and two big buck deer, horns in velvet, come to the meadow with a doe. They work down the far side of the stream and disappear.

After a second night we waken, reluctant to leave. In the first still hush of daybreak, Gary, in wet boots, helps Hunter round up the horses that have strayed down the meadow in the night. We shake off the chill of a thirty degree August night with coffee, pancakes, bacon, toast, jam and trout.

Horses are silently saddled, packed and ready. There is one long, last look at Elk Meadow. No longer dudes, but still stiff and sore, fishermen all, we retrace our route. Down the meadow at first, then up, and up, through the wildflowers, threading a path between the stone cairns across Flattop and down the switchbacks. The horses brighten as they sense the stables. The riders, tired and dirty, sit proudly straighter the last mile to the barn.

Never to be forgotten by us, never to be erased; only to be burnished brighter by memory and the years, is this, our finest experience in family living. ■

News Briefs From the Conservation World

Parks Advisory Board Meets

A May meeting of the Advisory Board on National Parks, Historic Sites, Buildings and Monuments resulted in the recommendation to the Department of the Interior that a plan be formulated as quickly as possible in order to preserve "unique and priceless areas before they are irreparably damaged." In line with this recommendation, the Board, which met in Washington and Philadelphia, advised the establishment of Navajo National Park south of the Glen Canyon Recreational Area in Arizona. The proposed park would include Rainbow Bridge National Monument in Utah. Other areas recommended for preservation are: a portion of Tucson Mountain Park in Arizona, to be added to Saguaro National Monument; and Agate Springs Fossil Quarries in Nebraska, to be established as a national monument.

The Advisory Board, whose chairman is Frank E. Masland, vice-president of National Parks Association, reaffirmed its earlier endorsement of Cape Cod, Point Reyes, Padres Island and Oregon Dunes areas for establishment as national seashores. It also urged the Secretary of the Interior to take all possible steps to protect Rainbow Bridge National Monument from invasion of waters backed up by Glen Canyon Dam in accordance with the Colorado River Storage Act.

On September 15, the Advisory Board will meet in Olympic National Park.

First International Conference on National Parks

The first international conference on national parks will be held in connection with the Century 21 Exposition which opens next year in Seattle, Washington. Officials, leaders and representatives of parks organizations from all over the world will meet from July 1-8, 1961, in Seattle. Sponsors of the conference are the International Union for the Conservation of Nature and Natural Resources and the International Commission on National Parks, Brussels, Belgium; and the Natural Resources Council of America, Washington, D.C. Dr. Clarence E. Cottam, president of National Parks Association, has been selected to represent the Association on the organizing committee.

Interior and Agriculture Adopt Uniform Timber Practices

As a result of recent investigations by the Departments of Agriculture and Interior, Agriculture Secretary Freeman and Interior Secretary Udall have an-

DATES and PLACES

July 30-August 2 16th Annual Meeting, Soil Conservation Society of America. Purdue University, West Lafayette, Indiana.

August 7-11 3rd Annual Western Resource Conference. Engineering Auditorium, Colorado State University, Fort Collins, Colorado. Theme: Land and Water Planning for Economic Growth.

August 13-16 Conservation Education Association Annual Meeting. Montana State University, Missoula, Montana.

August 13-19 University of Iowa Family Camping Workshop. Palisades Kepler State Park, Mt. Vernon, Iowa.

August 25-26 7th Annual Field Conference, Friends of the Pleistocene, Rocky Mountain Section. Bear Lake-American Falls, Idaho. For information: J. Stewart Williams, Utah State University, Logan, Utah.

August 27-31 12th Annual Biological Sciences Meetings, Purdue University, West Lafayette, Indiana.

August 27 Nature Conservancy and Ecological Society of America joint field trip to Pine Hills Reserve and Allee Research Area, Indiana.

August 31 Entomological Society of America Field Trip to Indiana Dunes.

nounced adoption of specific recommendations to make timber sale practices of the two agencies more uniform. The joint study conducted by the Interagency Timber Appraisal Committee, reconciles the management practices involving 6.3 million acres of western Oregon land administered by the U. S. Forest Service and 4.6 million acres of western Oregon and Pacific Northwest lands administered by the Bureau of Land Management and Bureau of Indian Affairs.

The recommendations include standardization of inventory procedures, and procedures in determining allowable timber cut; possible adoption of the international measurement of board-foot volume of standing and sale timber; and a possible joint nursery program. A final recommendation strengthens existing interagency committees to maintain uniform timber practices in both departments.

Richard Pough Receives Garden Club Award

During the latter part of spring, Richard H. Pough, of Pelham, New York, widely known author and conservationist,

was awarded the Frances K. Hutchinson Medal for service in conservation. This medal is an award of the Garden Club of America to outstanding American conservationists; among those who have received it in the past are Louis Bromfield, Walt Disney, and Rachel Carson, author of *The Sea Around Us*.

Mr. Pough was cited as "the leader in the fight to preserve the few remaining natural areas throughout the country by setting them aside in perpetuity as living museums of our natural history heritage."

Selected Paragraphs

Seashore advocates in Oregon have organized to form the Oregon Dunes National Seashore Committee. They will campaign to rally support for Senator Maurine Neuberger's bill to put the dunes area into the national park system. . . . Although the new Kansas Statehood commemorative stamp proudly blazons a yellow sunflower across a brown field, a new Iowa state law condemns the sunflower as a noxious weed. . . . Twenty-seven bird enthusiasts under the leadership of Washington conservationist Orville W. Crowder spent the month of July on the first organized bird excursion into Europe. The group studied species from Scandinavia to the Mediterranean; satisfied participants look forward to a similar trip to the Orient. . . . *National Parks Magazine* contributor Joseph J. Shomon has become director of the new nature centers division of the National Audubon Society. Shomon edited *Virginia Wildlife Magazine* for many years past. . . . Not long ago, an unofficial newspaper poll to select a national bird in Canada resulted in victory for the Canada goose. Far behind in second place was the robin. . . . Campers who make their summer homes in national parks will have to cut their stay to two weeks during the crowded season, according to a new National Park Service regulation.

Wilderness Booklet and Film

Recently released by the U. S. Forest Service is the booklet *Wilderness* and a companion sound film in full color titled *The Wilderness Trail*. The illustrated booklet contains a map locating 83 wilderness areas of 73 national forests, and the regional offices where information about them may be obtained.

The 14½-minute 16mm movie, filmed in Wyoming's Bridger Wilderness Area, shows typical Americans enjoying the solitude of wild country. Both are available (the latter on loan) from the Forest Service, Washington 25, D.C.

Your National Parks Association at Work

Revised Boating Regulations Create Storm Over Yellowstone

In *National Parks Magazine* for July, there was a notice on page 16—entitled “No Retreat on Motorboats”—to the effect that “pressure is being generated in several Western States for a review by the Secretary of the Interior of the Yellowstone motorboating regulations promulgated by former Interior Secretary Fred Seaton . . .”

In recognition of the seriousness and nature of this pressure, NPA Executive Secretary Anthony Wayne Smith in early June despatched a letter to Secretary of the Interior Stewart L. Udall, with copies to all NPA cooperating organizations, stating that the Association “would deem it quite intolerable that any compromise should be made with respect to these regulations or that they should be withdrawn, curtailed or weakened in any fashion whatsoever.” Secretary Smith informed Mr. Udall that the Association was well aware that a commercially-organized minority was pressing for revision or abolition of the Yellowstone Lake regulations, and requested the Interior Secretary to lend full support to Park Service Director Conrad L. Wirth in maintaining and enforcing the regulations, which were designed for the protection of a portion of the lake for outdoor recreation minus the roar and fumes of speedboats, and for preservation of wildlife habitat in the vicinity. With the letter to Mr. Udall, Secretary Smith sent a copy of the statement on national park motorboat use adopted by the trustees at the Association's 1961 annual meeting the previous month. (See next page.)

On June 9th, in a press release under the remarkable title *Interior Department Reaffirms Controls on Yellowstone Boating*—and without public hearing or notice of any sort—Acting Secretary of the Interior John A. Carver, Jr., made public a revision of the Yellowstone motorboating regulations. “The new rules continue the protection of the quietude and natural qualities of the shoreline of the south and southeast arms of Yellowstone Lake,” said the Acting Secretary, “but they provide for water access, under conditions which the National Park Service can control strictly.” Also, noted Mr. Carver in part, “We have reduced the size of the closed areas to the minimum required to protect waterfowl nesting.” [Italics editorial.] The new rules, noted Secretary Carver, were subject to reconsideration.

On June 16th, Secretary Smith sent the following telegram to the Secretary

of the Interior: “This Association considers the new regulations on Yellowstone Lake to be a complete capitulation to motorboat interests and in violation of the National Parks Act. We consider promulgation without advance hearing, a serious violation of sound administrative procedure. We ask for immediate hearings and suspension of new regulations in the interim. We call for complete withdrawal of new regulations after hearing and return to those promulgated last winter. Hearings should be conducted by persons conversant with national park management principles and should not be subject to formal rules of evidence which have no application to policy judgments. The haste and secrecy with which this action was taken were unseemly.”

On June 17th, the office of the Secretary of the Interior announced that a public hearing on the revised regulations would be held in Salt Lake City, Utah, on July 17 with Interior Department Solicitor Frank J. Barry as hearing examiner. Said Assistant Interior Secretary Carver: “We intend to give everyone a chance to state his case . . .” In connection with this hearing, Secretary Smith sent a telegram, on June 23, to all NPA cooperating organizations, urging them to have representatives present to testify. Mr. Smith noted, in a follow-up letter, that in any case the summer boating season would be closed before any decisions were made as to amended regulations.

On July 17, Dr. Clarence Cottam, president of the National Parks Association, testified in behalf of the Association at the Salt Lake City hearing.

Dr. Cottam commented on the basic purposes for which the national parks were established, emphasizing that they are intended to serve as great natural museums in which the public may enjoy beauty and grandeur under unspoiled conditions, and that they were never intended to be amusement parks.

Pointing to the vast areas of water available elsewhere to motorboat enthusiasts, Dr. Cottam declared that there is no justification for such intrusion into national park lakes. “It will not do to say that the new regulations are a compromise,” he said, “The old regulations were a compromise, and the new ones merely pile compromise on compromise. The entire policy of allowing motorboats on Yellowstone Lake in the first place was in conflict with past national park policy.”

Dr. Cottam said further that the new regulations, issued as they were without

advance notice or hearings, should be vacated as making a mockery of the responsibility of the Secretary of the Interior for protecting natural conditions in the park and monument system.

Association Opposes Possible Minam Access Road

In a recent letter to Secretary of Agriculture Orville L. Freeman, NPA Executive Secretary Anthony Wayne Smith expressed the Association's strong conviction that no access road should be built by the U. S. Forest Service into the drainage basin of the Minam River, adjacent to and within the Wallowa National Forest of northeastern Oregon. Such a road, said Mr. Smith, would mean serious injury, or destruction, for one of the few remaining virgin timber stands in Oregon, one which possesses incalculable value for recreational, scenic, and wilderness purposes.

It is also the opinion of the Association, wrote Mr. Smith, that the Eagle Cap Wilderness Area of the Wallowas should be enlarged to include the Minam River Basin.

The Association had earlier testified at a Forest Service hearing at Le Grande, Oregon—through NPA trustee John Osseward, of Seattle—that the most judicious use of the Minam River watershed would retain it in a roadless and wild condition. The preservation of the clear streams of the Minam watershed from roadbuilding and logging is perfectly consistent with the principles of Forest Service multiple-use policies, said the Association.

NPA Intervenes in Marble Canyon Case

Late in June the National Parks Association filed a petition to intervene in the matter of the Arizona Power Authority's application with the Federal Power Commission for a license to construct a dam at Marble Canyon on the Colorado River. On June 21, the City of Los Angeles, whose application for a license to build a dam at Bridge Canyon on the Colorado is in conflict with that of the Arizona Power Authority, submitted testimony proposing diversion of the Colorado River at Kanab Creek. This diversion would impair the flow of water through Grand Canyon National Park and Grand Canyon National Monument. It would also involve construction of conduits, adits, an electric power plant, and transmission lines in the park, as well as in Kaibab National Forest.

The basis for the Association's inter-

vention rests in the federal law which provides that licenses for dams or other hydroelectric developments in national parks or monuments may not be granted without specific authority of Congress. Thus the Federal Power Commission is without authority to grant a license for construction as proposed by the City of Los Angeles. It is the position of the National Parks Association that “whether or not the Kanab Creek diversion be incorporated into the Marble Canyon Project, the construction of Marble Canyon Dam by altering the flow of the Colorado River through the Grand Canyon National Park and Grand Canyon National Monument will impair said Park and Monument, but further, that if said Kanab Creek diversion be included in such project, the scenery and the natural and historic objects and the wildlife therein would be impaired by the conduit, adits, spoil banks, powerhouse, reservoir and other developments contemplated.”

At press-time, the Federation of West-

ern Outdoor Clubs indicated its intention of participating in the Association's action in the Marble Canyon case.

Secretary and Party Tours Utah Area

Conservationists are, by and large, a hardy lot, ever ready to acquire sore backs and blisters in behalf of possible new and worthy additions to the nation's public preservations.

On receipt of a news release from the office of Secretary of the Interior Stewart L. Udall late in June, therefore, leaders of conservation organizations checked their supplies of liniment, band-aids and pemmican, looked to their well-worn jeans and cowhides, and vowed that *this* time they wouldn't forget the toothpaste.

For Secretary of the Interior Udall was on the move again, the release said, this time to study the magnificent and broken country around the confluence of the Green and Colorado Rivers in southeastern Utah. Date of the trip: July 2 to

6; prime purpose, to evaluate a portion of that wild chaos of mesa and canyon for possible national park status.

According to the press release, Secretary Udall's brothers-in-the-field were to be members of the Utah Congressional delegation, Utah officials, press representatives, and leaders of national conservation organizations. But a quick check with the Secretary's office in Washington, D.C., revealed that the expedition seemed long on Congressmen and newsboys and short on conservation leaders; so short, in fact, that at the time of inquiry, but a few conservation leaders seemed destined to carry the blisters for the entire fraternity. However, if additional conservationists become involved in the Secretary's tour before press time, an appropriate notice will appear on this page.

The Secretary and his party will reconnoiter the plateau country of the area to be inspected, and the itinerary also calls for trips to Upheaval Dome, Grandview Point and Dead Horse Point.

A Statement of Policy

The following statement concerning the use of motorboats on lakes within the national parks and monuments was approved by the Board of Trustees of the National Parks Association at the organization's annual meeting for 1961, held in Washington, D.C., on May 25.

THE EXPLOSION OF MOTORBOATING on the lakes in our national parks and monuments has become a serious danger to the values for which these areas have been established and protected.

A measure of the danger is the increase in motorboat use on Yellowstone Lake from 1000 to 6000 in the last five years.

Not only has there been a sharp increase in the number of motorboats, but their speed and power have also increased, and not only wildlife, but also the solitudes and quietudes of the lakes have been seriously impaired.

We commend the National Park Service on having zoned Yellowstone Lake against all motorboating in the three southern arms, even though we recommended that the protected area be considerably larger.

In our judgment, however, the use of motorboats on waters in the national parks and monuments for other than rescue and patrol purposes, or for visitor access where otherwise impossible, as in the Everglades and Isle Royal, is in fundamental conflict with the principles of the National Parks Act.

We strongly recommend to the Service that it call a firm and complete halt to the admission of motorboats to any waters in the parks and monuments where they have not yet been admitted.

We recommend that zoning regulations of the kind adopted at Yellowstone be promulgated for all waters in

the parks and monuments where motorboat use is now allowed, placing a definite limitation on areas available for motorboats.

In order to minimize damage and disturbance, the Service should also consider regulations limiting the number and size of motorboats and the horsepower of motors on park and monument waters where such boating is permitted.

Regulatory restrictions might well be tightened progressively where feasible with a view to the ultimate elimination of motorboating, except for rescue, patrol, and necessary access.

Plans for the construction of additional docks, marinas, and launching facilities should be reconsidered; many people feel that these accommodations merely serve as invitation to the increased use of motorboats in park waters.

There is abundant space for motorboating in this country outside national parks and monuments; on reservoirs, in national recreation areas, on lakes in national forests, in State parks and forests, along many big rivers, on the Great Lakes, in the coastal waters, and in the Gulf and in the oceans.

This Association will stand firmly behind the National Park Service in any efforts it may make to control and eventually eliminate the motorboat traffic along the lines recommended in this statement.



The Editor's Bookshelf

GIFFORD PINCHOT: Forester-Politician. By M. Nelson McGeary. Princeton University Press, Princeton, New Jersey, 1960. 481 pp. Illus. \$8.50.

This is an excellent and long overdue biography of the father of American forestry and one of the founders of modern progressive American politics. Heir to a fortune, Gifford Pinchot might have contented himself with a leisurely and pleasurable existence, but deliberately chose a vigorous life in the public service. Putting himself through school in the European universities, he learned the profession of forestry as it was taught abroad, and came back to adapt his knowledge to the uses of a totally different environment.

Recognizing, long before others, the imperative need for continued public ownership and management of large reaches of the immense forests which still dominated the North American continent, and on which the American economy and society were so heavily dependent, he entered with devotion and astuteness into the complex intrigues of the Capital through which the essential public authority could be assembled into a suitable government agency. Pinchot found a natural sponsor and patron of his ambitions in Theodore Roosevelt. He allied himself with the strenuous young President, and the birth and growth of the United States Forest Service in the Department of Agriculture was the crowning consequence.

But the skilled forester was also the adept politician, as indeed he must necessarily have been, for forestry was dependent on government. The story of Pinchot in politics, twice-elected governor of Pennsylvania over machine opposition, aspirant for the Presidency during the depression, battler for the plain people against what he called "concentrated wealth," is well recounted, and the great stature of the man emerges for anyone to see.

One might wish that the author had stressed some of Pinchot's basic ideas on forestry a little more emphatically. One of the fights the Governor got into every few years was to prevent the national forests being turned over to the States, and thereafter to private ownership. We go through this act every decade or so in this country, but thus far, fortunately, we have held on to the national forests.

Forgotten by now in some quarters is the fact that Pinchot stood not only for extensive public ownership of large forested areas, but for Federal Government regulation of private cutting on the remaining private lands. Public regulation was essential because private owners, big and little, had failed to conserve the nation's heritage. State regulation would not do the job, because State governments in too many cases were under the control of the lumber and paper industries.

Still less well understood is the fact that forestry to Pinchot meant selective cutting. All cutting, whether on private or public land, in his view, should be done under the supervision of professional foresters employed by the U.S. Forest Service. Every tree should be marked above and below the cut with the insignia axe of the Service. The Service shield was a badge of authority to be exercised strongly and firmly in the public interest.

Since his passing, we have seen the clear-cutting of the Pacific Northwest, the coast redwood belt in California, and many other magnificent timbered areas in this nation, which the father of American forestry might have handled a little differently.

There are some signs that a change of heart may be taking place as the second and third growth comes back; we may decide to consider the ecological effects of our timber harvesting methods. If so, it will be better for the watersheds, the wildlife, soil, the scenery, the recreational

opportunities, and the productivity of the forests themselves, not to speak of the people who inhabit this country.—*A.W.S.*

BIRDS OF THE NATIONAL PARKS IN HAWAII. By William W. Dunmire. Hawaii Natural History Association, Hawaii Volcanoes National Park, Hawaii, 1961. 36 pp. Illus. \$60 postpaid.—Pamphlet-sized local bird lists are hatching fast these days; but here is one that deserves attention beyond the boundaries of our fiftieth State. Distribution and habitat preferences within the two Hawaii national parks are given for thirty-two species. The color cover of thirteen Hawaiian birds, repeated inside the booklet, is eye-catching despite understandable trouble with color reproduction. The cause of conservation is served by excellent references to ecological factors, reasons for the paucity of species, and the danger attendant upon introduction of exotics.

—*Orville W. Crowder*

Classified Advertising

20¢ per word—minimum \$3. Payment must be enclosed with all orders.

CANOE TRIPS—in famed Quetico-Superior wilderness! Complete or partial outfits at low daily rates. Beginners welcome. Free canoe trip planning kit. Border Lakes, Box 569K, Ely, Minnesota.

WILDERNESS CANOE TRIPS into the Quetico-Superior. Complete, personal service. For information, write Bill Rom, Canoe Country Outfitters, Ely, Minnesota.

HARPERS FERRY, booklet *Yesterday and Today*, complete pictorial history, 50¢, Marlin Fenical, 3192 Key, Arlington, Virginia.

CAMPING AND Mountaineering Equipment. Black's sleeping bags, Optimus stoves, Beardmore dehydrated foods, Stubai climbing iron, etc. Illustrated catalog available. Mountaineering Supply, Dept. NP, 897 St. Davids Lane, Schenectady 9, New York.

PLANNING FOR AMERICA'S WILDLANDS

By Arthur H. Carhart

Author of "The National Forests"

A Handbook for Land-Use Planners, Managers and Executives, Committee and Commission Members, Conservation Leaders, and All Who Face Problems of Wildlife Management

"The wilderness, mother of resources, out of which civilization has been fashioned . . . is the latest of all resources to be recognized as itself in need of conservation."—*Howard Zahniser, The Wilderness Society.*

Ninety-seven pages in paper cover, illustrated in black-and-white, and now available from the National Parks Association, 1300 New Hampshire Avenue N.W., Washington 6, D.C. Price, \$2.50, plus 10¢ postage.

THE CONSERVATION DOCKET

Allagash National Recreation Area. The National Park Service has proposed preservation of the Maine backwoods country along the Allagash River and its headwater lakes as a national recreation area. The proposed area, some 60 miles in length with 246,000 acres of forested land and 50,000 acres of water, would be managed for canoeing, hiking, camping, hunting and fishing. At present the Allagash lands are privately owned and managed for pulp and timber, principal industries in Maine. Interior Secretary Udall has withheld recommendations concerning the preservation pending investigation of hydroelectric projects proposed for the St. John River, of which the Allagash is a tributary.

Cape Code National Seashore. S. 857 (Saltonstall-Smith), H.R. 5786 (Keith). A breakthrough in park legislation occurred late in June when the Senate passed without debate the bill to establish a 30,367-acre Cape Cod National Seashore. The bill moved very quickly after the Committee on Interior and Insular Affairs ordered a report; actual time on the Senate floor was less than a half-hour.

As amended by the Committee and passed, S. 857 provides for a national seashore, instead of a national seashore park, on the basis that some activities not permitted in national parks, like hunting, may be permitted in national seashores. Another amendment deletes the provision which would compensate towns for loss of taxes resulting from federal acquisition of lands. The Committee points out that the tax base of towns would be enhanced rather than diminished by park developments.

Although the original version of S. 857 had reduced the National Park Service's recommended boundaries to allow for expansion of five town areas, in the case of Provincetown, the town chose to have 394 acres of undeveloped lands included in the seashore. Another boundary revision includes the National Audubon Society's Wellfleet Bay bird sanctuary.

The corresponding House bill has been lagging behind its Senate brother in the House Rules Committee. Like the Senate bill, it eliminates the tax compensation provision. Unlike the Senate bill, it deletes the clause which permits the National Park Service to contract for lands before actual appropriations are passed by Congress, and reduces the boundaries recommended by the Park Service by some 2400 acres to exclude Morris and Stage Islands, Monomoy Wildlife Refuge, all but 500 feet of Griffin Island, and portions of other town areas. The total area of the House-proposed seashore would be 26,139 acres. These boundaries are more in line with local demands for a smaller park to allow for future expansion of towns; the boundaries of the Senate bill are an attempt to compromise between town needs and recommendations of the National Park Service for adequate preservation.

It is expected that the problem of boundaries will be the trouble spot on the House floor. Both bills will probably go to a conference

committee before final boundaries are determined. *As we go to press: House has passed the Keith bill, both bills are in conference.*

Ice Age National Park. S. 1981 (Wiley and Proxmire), H.R. 7236 (Reuss), H.R. 7409 (Johnson). To authorize establishment of the Ice Age National Park in Wisconsin to preserve relics of continental glaciation, "including moraines, eskers, kames, kettle-holes, drumlins, swamps, lakes, and other reminders of the Ice Age." The park would include portions of the Kettle Moraines State Forest, Devils' Lake State Park, Interstate Park. Wisconsin State legislature and local organizations have expressed support for the bill but there have been no recommendations on the Federal level. House and Senate Interior and Insular Affairs Committee.

Oil Pollution Treaty. By unanimous vote in May, the Senate ratified the International Convention for the Prevention of Pollution of the Sea by Oil. The convention would give consideration to the uniformity of regulations concerning oil pollution of the sea caused by off-shore dumping. Existing conditions on oil-slicked beaches are a threat to shore birds and their food resources.

Ozark Rivers National Monument. S. 1381 (Symington and Long), H.R. 5712 (Ichord). Hearings on the proposed Ozark Rivers National Monument, which would preserve portions of the Current and Eleven Point Rivers in Missouri, were held in both House and Senate Interior and Insular Affairs Committees in July. Although Forest Service testimony supported establishment of a national monument administered by the National Park Service, certain local interests favored preservation under Forest Service management. Another bill, H.R. 6289 (Curtis) would provide for an Ozark Rivers Scenic Waterway under the jurisdiction of the Forest Service.

Shorelines Bill. S. 543 (Anderson and others.) The Department of the Interior has recommended enactment of this bill to investigate shoreline areas for preservation. The measure would authorize the Secretaries of Interior and Agriculture to study such shoreline areas as Huron Mountains in Michigan, Channel Islands in California, Fire Island in New York and Pigeon Point in Minnesota. Subcommittee on Public Lands has reported the bill favorably to the Senate Interior and Insular Affairs Committee.

Wilderness Bill. S. 174 (Anderson and others). *At presstime, we learn that the Wilderness Bill has finally been reported out of the Interior and Insular Affairs Committee. Five years ago Senator Humphrey introduced the first Wilderness Bill, but neither that, nor succeeding versions had ever gone beyond the committee room. The reported version includes Senator Church's amendments on primitive areas and prospecting.*

Capitulation

(Continued from page 2)

lations have been issued without hearings, and with great urgency to make sure that motorboats get on the water early in the summer.

This Association, and doubtless others, will press for hearings, but there is no chance of stopping these violations this season.

We could forgive this about-face more readily if it had not been glossed over with fine words about wilderness protection. The decision is a simple

capitulation and should be described as such.—*A.W.S.*

The Reappraisal Proceeds

PARK SERVICE Director Wirth is to be congratulated on his statement at the Frontiers Conference at Grand Canyon in April with respect to the reappraisal of *Mission 66*.

We urged a reappraisal in our April issue, recommending that big roads and startling architecture be downgraded, and that more emphasis be placed on protection, interpretation and research.

Apparently the Service and the Association have been thinking along

similar lines. The Director suggested that facility construction was nearing completion and emphasized the importance of a vigorous enlargement of the national park and monument system; in this we heartily concur, provided always that protection is not sacrificed to expansion.

The Director showed his keen awareness of the importance of an altered balance favoring preservation as contrasted with development and facilities; in that kind of a reappraisal he can expect the full support of this Association and other like-minded public interest groups.—*A.W.S.*

