

National Parks & Conservation Magazine

The Environmental Journal

July 1977



A Note about Cities

WE HAD COME from working with the U.S. Delegation to the UN Conference on the Law of the Sea. The responsibility which had settled upon us at length over the years was to get some attention and protection for the oceanic fisheries and the marine mammals. The living resources of the seas have been given short shrift within the powerful play of economic and military concerns in these meetings for a decade.

The organized defenders of the whales and porpoises had given a reception for delegates to the Conference at the meeting room of the Carnegie Endowment, opposite the UN. They had staged an International Whale Rally in the evening.

The pollution of the oceans was also before us, as a matter of deep concern for years. And because none of the issues in the Conference will be solved until the deep seabed mining issue has been settled, we have engaged that issue also.

Images of the meeting room at the U.S. Mission were in my mind, and of the working offices, the great halls of the Secretariat building, the delegates in debate, the flags of 150 nations crackling in the wind along the Plaza.

AND NOW I sat with friends in a quiet garden within the clattering city. A generation ago a wise urbanist had rescued a dozen or so brownstone houses and protected them by covenant, merging the useless and neglected rear yards into a small commons. We sat under spreading plane-trees, strolled along walks with hedges and limpid pools. As evening deepened, light from the dining rooms warmed the darkness; framed in unshuttered windows, people set tables for dinner or sat reading in their homes.

We published on the theme of Urban Gardens years ago, proposing a plan for closing off every other street, combining groups of blocks into superblocks, using the space saved for local parking and gardens, taking the suburban parking off the main streets and stopping it at the outskirts, with public transport into town. No one paid any attention. The automobile was still the king. Now the throne is tottering.

We have embarked on a new chapter in the history of the national parks and of NPCA. Keeping contact with our offices by telephone while in New York, I decided on the employment of an Administrative Assistant for Regional Parks whose work will turn around the new units being added to the System, such as Cuyahoga National

Recreation Area in Ohio, and Gateway NRA in New York.

THE CENTRAL PROBLEM is to provide access to nature for the people of the run-down neighborhoods of the big cities. The natural setting must be preserved in the process, or there will be no point to the whole effort. The work must be done without diluting the fundamental purpose of the National Park System: the protection of wilderness America. Major problems like the best use of the different elements of the Land and Water Conservation Fund are involved, as well as land-use and management questions within and around the new units.

Gateway NRA includes beaches and wetlands on Long Island, Staten Island, and Sandy Hook. The National Park Service has proposed such heavy use as to destroy them. Huge crowds would be transported from as far away as the Bronx across a traffic-choked city. Many local people would rather have the open spaces in their own neighborhoods. And so we have recommended the re-establishment of the HUD open-space program, using federal funds to be matched by the states or cities, not drawn from LWCF.

THE MISERY of the big cities is a function of traffic and air pollution, among other things. The remedies we talked about in our Urban Gardens program years ago are still available: peripheral parking, public transit, closing down some streets, no parking on the other streets, super-blocks, gardens (for both vegetables and flowers) in the center of the big blocks, isolated from the traffic.

Call all this, if you please, a program for inner-city open space; or call it urban consolidation as contrasted with urban sprawl or cancerous urban growth. As we shut off the illegal immigration over the Mexican border, keeping our own low birth rates, the economic factors now beginning to create vacuums or negative pressures against congestion will help to further such an inner-city open space policy.

Urban abandonment we have with us already. We talked that night in the garden about the deserts of the Bronx: huge neighborhoods which the landlords have deserted; where tenants are squatters; where it is unwise for an outsider to travel without an armed escort; where fire, police,

Continued on page 31

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COVERS Lake Clark National Park

Turquoise Lake is one of many landing sites for float planes that provide convenient access to the wilderness backcountry of Lake Clark National Park. This park provides habitat for a multitude of wildlife, including the world's largest carnivore, the Alaskan grizzly. It is one of a baker's dozen of proposed units in Alaska that would double the size of the National Park System. (See page 4.) Front cover by Bob Waldrop, National Park Service; back cover by Stephen J. Krasemann.

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National Parks & Conservation Association, established in 1919 by Stephen Mather, the first Director of the National Park Service, is an independent, private, nonprofit, public service organization, educational and scientific in character. Its responsibilities relate primarily to protecting, promoting, and enlarging the National Park System, in which it endeavors to cooperate with the National Park Service while functioning as a constructive critic. In addition, the Association engages in domestic and international programs involving parks, forests, wildlife, wilderness, recreation, open space, rivers, oceans, pollution, pesticides, ecology, environment, population, transportation, historic and archeological preservation, natural resources, and related or comparable matters. Life memberships are \$600. Annual membership dues, which include a \$6.50 subscription to National Parks & Conservation Magazine, are \$120 Sustaining, \$60 Supporting, \$25 Contributing, \$18 Cooperating, and \$12 Associate. Student memberships are \$8. Single copies are \$1.50. Contributions and bequests are needed to carry on our work. Dues in excess of \$6.50 and contributions are deductible from federal taxable income, and gifts and bequests are deductible for federal gift and estate tax purposes. Mail membership dues, correspondence concerning subscriptions or changes of address, and postmaster notices or undeliverable copies to National Parks & Conservation Association, 1701 Eighteenth Street, NW, Washington, D.C. 20009. When changing address, allow six weeks' advance notice and send address label from latest issue along with new address. Advertising rates are available on request from headquarters in Washington.



SHEEP AND CARIBOU TRAILS, BY M. WOODBRIDGE WILLIAMS, NATIONAL PARK SERVICE



Although wild and still partly unexplored, spectacular Lake Clark National Park is the most accessible of the proposed fly-in parks in Alaska

by CHIP BROWN

Lake Clark National Park: THE ALPS OF ALASKA

IN SOUTHWESTERN Alaska, the Alaska Range, having climaxed in Mount McKinley, curves down from the north to meet the Aleutian Range, sweeping up from the Alaska Peninsula in the southwest. At the awesome nexus of these ranges lie the Chigmit Mountains—a jumbled array of craggy peaks and glaciers often called the Alps of Alaska. Although the Chigmits are scarcely one hundred miles (160.9 kilometers) southwest of Anchorage, Alaska's largest city, they are surrounded by a region of extraordinary breadth and diversity that is still unspoiled and largely unexplored.

Within this region's boundaries are rugged mountain peaks and active volcanoes, tundra plains, glaciers, lakes, waterfalls, many rivers, and many more creeks. Dall sheep traverse the mountain slopes, and moose browse its lowlands. Wolves roam its forests, and black and brown bear forage along its riverbanks. Its seacoasts harbor seals, otters, and white beluga whales. Sea birds abound, and hawks and eagles glide above its barren tablelands and across its rugged peaks.

This magnificent area has been proposed for designation as Lake Clark National Park. It is among the Alaskan lands Congress is now considering preserving for the benefit and inspiration of the nation.

THE NATIONAL Park Service has had its eye on the Lake Clark area since the late 1950s, attracted by the great diversity of topography and plant and animal life. The Native Claims Settlement Act passed in December 1971 stipulated, among other things, that the Secretary of the Interior should withdraw up to eighty million acres all over the state from settlement so that this and additional acreage might be studied for possible inclusion in one of the national systems for preserving natural areas: national parks, wildlife refuges, wild and scenic rivers, and national forests. In 1973 Secretary Rogers C. B. Morton included an area of 2.8 million acres (1,133,000 hectares) for establishment as Lake Clark National Park among his recommendations for additions to the four systems. The acreage of the proposed park has varied during the past few years as various groups have made their own proposals. Conservationists in particular have pushed for larger tracts. They see the need to protect whole ecosystems, and they recognize the delicate nature of northern ecosystems, which require large amounts of land to sustain populations of wildlife.

The deadline for resolving these land use questions is December 1978. At present the Alaska National Interest Lands Conservation

Act (HR 39), sponsored by Congressman Morris Udall and seventy-five colleagues, is before the House of Representatives, and a similar bill (S 500) is before the Senate. These bills would protect a total of about 116 million acres and would set aside 7.5 million acres (3,034,900 hectares) for Lake Clark National Park, making it one of the largest and wildest parks in the National Park System.

THE EASTERN boundary of the proposed park fronts the western and wilder side of Cook Inlet. This coastal realm is the first of four physiographies the park comprises. (The others are the inland mountain region, the western interior plains, and the lakes and foothills district.) This coastal region is highlighted by three fuming volcanoes: Iliamna, Redoubt, and Mount Spurr in the northeast corner. (Mount Spurr is part of a different range of mountains—the Tordrillo—and is included in only the Udall proposal.) Redoubt and Iliamna volcanoes loom more than 10,000 feet (3,048 meters) above their bases at sea level. They stand serene and self-contained, like two sentries, guarding the gateway to the awesome wilderness farther west.

All three volcanoes belong to that notorious chain, the Pacific Ring of Fire. The bulk of Iliamna



MERRILL PASS AREA, CHIGMIT MOUNTAINS, BY M. WOODBRIDGE WILLIAMS, NPS

Volcano was extruded relatively recently—in Quaternary time—and the country over which it presides is probably still as fresh as it was then. Hickerson Lake is literally under the volcano; into it plunge a dozen waterfalls hundreds of feet high. Marten, red fox, muskrat, and lynx live in this area; and one can find balsam poplar, quaking aspen, Sitka spruce, white spruce, blueberries, and huckleberries. One would rather not find—but does—the spiny shrub devil's-club and the maddening alder.

This coastal region ranges from flat, swampy river outwash to relatively mountainous terrain. Two big tidal bays, Tuxedni and Chinitna, cleave the shoreline immediately north and south of Iliamna Volcano. Many species of waterfowl nest in the area, as do ospreys, peregrine falcons, and bald eagles. Acres of razor clams feed in the fabulously stocked intertidal marshes of the coastline, which, if protected, will measure more than sixty miles.

Inland, lakes like Hickerson

Lake and Crescent Lake, between Redoubt and Iliamna volcanoes, have formed behind the terminal moraines of glaciers. Red Glacier drops thousands of feet down the face of Iliamna, its surface peppered with small lakes. Some glaciers are miles wide. Sometimes their snouts have forged across the mouths of valleys or, like Shamrock Glacier, into a long lake trough, creating two lakes where there would otherwise be just one. Blockade Lake, another glacially blocked lake, swells each spring with meltwater and cuts its way out through the ice dam. The entire lake drains into the McArthur River, leaving the lake bed empty except for large chunks of ice stranded on the floor, like toy boats in an emptied bathtub.

THE VARIOUS park proposals differ in where they draw the western edge of the park. The Udall bill substantially extends it westward in order to protect both the watershed of the world's salmon capital, Bristol Bay, and the Mulchatna caribou herd that roams be-



KEITH TREXLER, NPS

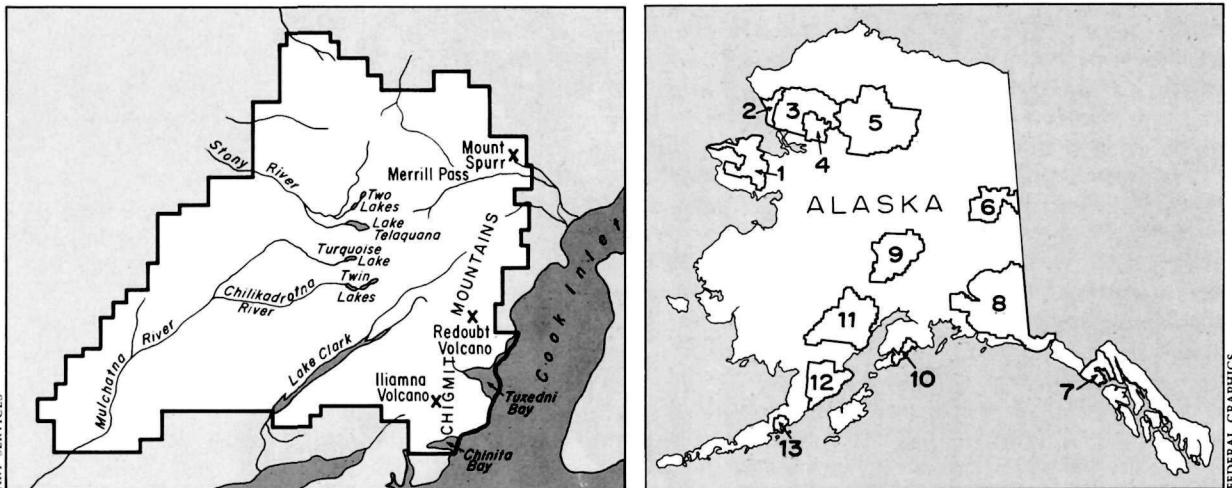
tween the Mulchatna and Stony rivers. These far western acres have been called "superb wildlife habitat." The creeks and rivers rushing west out of the mountains gradually become unhurried and serpentine, wending their way through hills and across tundra plains.

The National Park Service expects visitors to view these vast empty regions primarily by river. The Chilikadrotna River, by reputation a rafter's dream, flows out of Twin Lakes past the Bonanza Hills where the Mulchatna herd is said to calve. It runs through the heart of country the Udall bill would add to the proposed park, issuing into the Mulchatna River and finally into the Nushagak, which empties into Bristol Bay. Salmon swarm up these prized waterways, sometimes spawning as far inland as the lakes tucked in the western Chigmits where the rivers begin. Much of this western country outlying the mountains is low tundra, some of it water-sopped, and some covered with thickets of brush and dense stands of shallow-rooted black spruce.

NATIONAL PARK SYSTEM PROPOSALS IN ALASKA

1. Chukchi-Imuruk National Monument
2. Cape Krusenstern National Monument
3. Noatak National Preserve
4. Kobuk Valley National Monument
5. Gates of the Arctic National Park
6. Yukon-Charley Rivers National Preserve
7. Glacier Bay National Monument
8. Wrangell-St. Elias National Park-Pre-service
9. Mount McKinley National Park
10. Kenai Fjords National Monument
11. Lake Clark National Park
12. Katmai National Monument
13. Aniakchak Caldera National Monument

Proposed Lake Clark National Park



EAST NORTHEAST over the tundra plains, the country gradually rises into the lakes and foothills region—a landscape shaped by vanished glaciers. The piedmont hills, terminal moraines, and large lakes found all along the western flank of the Chigmits will probably be the most used part of the park.

The lakes, from Lake Clark, the largest and longest lake, in the south to Two Lakes in the north at the debouche of Merrill Pass, are the keys to the park. They are set at varying elevations. Two Lakes and Lake Telaquana in the north are lower than Turquoise Lake and Twin Lakes, whose shores are bare tundra, unencumbered by the exasperating undergrowth that circles the lower lakes. High ridges around Telaquana, however, provide fine hiking; high plateaus are pitted with small ponds, and every bend reveals another vista or promises a glimpse of Dall sheep or bear or scolding ground squirrel.

The western slopes of the Chigmits rise rapidly; little but lichen can live there above three thousand

feet, and the ground is mostly bare. Countless waterfalls cascade from high crevices among the rock. Rivers milky with glacial sediment from the high mountain glaciers wind through rubble-filled, deeply pleated valleys. In the lakes the fine silt settles out, giving them a fantastic blue color, and the water exits as clear as vodka.

In addition to being attractions themselves, the lakes provide access to the backcountry. They have long served as landing sites for float planes—depots in the wilderness for fishermen and hunters and a stray climber or two. Cabins skirt their shores, ensconced in spruce and willow. Log-framed windows look out on country as pretty as any.

Ironically, because of native use, most of the shoreline was set aside for native selection, and only a third of the park's namesake, Lake Clark, was included in the original Morton proposal. The lake lies in a long northeast-trending fault that slices through the southern part of the Chigmits, reaching its high point at Lake Clark Pass, north of

Redoubt Volcano and not far from Blockade Lake. Lake Clark's azure waters form a large part of the Kvichak River system, the world's most important spawning and rearing watershed for red salmon. Many hanging glaciers line the valley walls of the Tlikakila River, which flows into Lake Clark. Lake Clark Pass and Merrill Pass in the north are the main routes through the mountains. On nice days the air traffic is heavy—as many as sixty planes a day fly through these two passes. You can fly to Summit Lake at the top of Lake Clark Pass and experience the thrill of floating the Tlikakila River, which has been described as "one long rapid."

After a land swap in January 1976 with a native corporation, Morton's Lake Clark proposal was boosted by a million acres. Notable additions were a narrow, azure lake east of Lake Clark called Kontrashibuna Lake plus another third of Lake Clark, making the amount of the lake actually inside the park boundary about the same as in the Udall bill.



GLACIER IN LAKE CLARK PASS, BY RANDY JONES, NPS



TWIN LAKES AREA, BY M. WOODBRIDGE WILLIAMS, NPS

THE CARTER Administration has yet to introduce its own legislation, but it intends to make its recommendations by fall 1977. However, any Administration proposal will probably set aside less land than Udall's bill, because the various government agencies are under pressure from mining and development groups. The former state administration in Alaska was even development-hungry enough to suggest that a highway might be forced through Merrill Pass or Lake Clark Pass in order to open up the southwest area of the state. Although Lake Clark Pass is not high or particularly steep, it could strain even the redoubtable ingenuity of highway engineers. They would be obliged to find a way to get a road over two abutting frolicsome glaciers at the crest of the pass—and keep it there.

The chances are that no roads will be built through Lake Clark National Park. The current Alaskan governor, Jay Hammond,

seems to be more environmentally sensitive than his predecessor; and although the Udall bill is far from law yet, it contains a provision to designate all of Lake Clark a wilderness area—a measure that would bar roads and would require that even some welcome trails would have to be blazed with hatchets, axes, and unmotorized saws.

A QUESTION persistently put to people who favor as little development of the area as possible is, how will anyone then be able to see the park? Some of the lakes have been suggested for what one park planner referred to with a little embarrassment as "rustic cabins," and the maps are dotted with hypothetical transportation hubs from which scenery-hungry hordes will fan out to points of maximum appreciation.

In regard to the mountainous areas, the only answer to the skeptic's question is that visitors may not see them at all. At present the



BRAIDED STREAM, BY M. WOODBRIDGE WILLIAMS, NPS

mountain passes are cloud-covered and impassable one out of every three days. The outskirts can often be viewed from the lakes, but the mountain interior goes unseen for days, and much of it still has never been traversed. Although none of the peaks is higher than the three volcanoes, the slope at which they ascend to seven, eight, and nine thousand feet is what climbers are wont to call "thought-provoking." Unless a hiker is equipped to negotiate glaciers, icefalls, and avalanching cirques, many of the highest peaks can be reconnoitered only from afar. One advantage to backpackers is the low passes; and although it is virtually impossible to strike directly across the Chigmitts on foot, intricate routes can be found in and around the higher elevations. Of course, most people travel to wilderness areas in Alaska by airplane.

In trying to keep this country in its present wild and isolated splendor and at the same time satisfy

Message to Members

**HELP ESTABLISH
LAKE CLARK NATIONAL PARK**

One of the most fantastic Alaskan areas proposed for inclusion in the National Park System, Lake Clark National Park encompasses an extraordinary diversity of terrain—river marshes in the coastal lowlands, fuming volcanoes, glaciers, rugged mountain peaks, forested slopes, waterfalls, glacial lakes, tundra plains, a myriad creeks and rivers—and a wealth of wildlife.



OXBOWS ON THE FLATS OF COOK INLET, BY M. WOODBRIDGE WILLIAMS, NPS

those who feel that without roads no one can afford to see it, the National Park Service has suggested that it defray the cost of shuttle airfare, as it subsidizes shuttle buses in Mount McKinley National Park. The Park Service estimates that between 15,000 and 30,000 people per year will visit the park.

Sightseeing is only one of the pressures bearing ever more heavily on these tracts of Alaskan wilderness. Hunting is at the moment one of the more controversial uses of the lands and one of the chief snags in getting Lake Clark National Park established. The Udall bill disallows sport hunting in national parks but permits subsistence hunting by individuals who can prove customary and consistent use of an area for subsistence. This provision is unpopular on two fronts—with some conservationists, who feel that hunting has no place at all within a national park; and with residents of Alaska

who would be excluded from sport hunting in those areas. However, it should be pointed out that sport hunting would be allowed in 56 percent of all land designated in the Udall bill.

With the conservation bills now before Congress, we can act with foresight instead of experiencing belated regret. We might never again have the opportunity to save this awesome region and to reserve the invaluable chance to be renewed by Alaskan wilderness. In his introductory remarks before the House, Congressman Udall said, "Each generation has its own rendezvous with the land, and we must now press forward with the opportunity to help provide those generations yet unborn the right to this heritage."

FLOWING EAST from Merrill Pass is a river with a name I especially like—Another River. It is a simple enough name that admittedly says nothing about the

The House Interior Subcommittee on General Oversight and Alaska Lands has held hearings all over the country about the national interest lands in Alaska. Invited to hearings in Washington, D.C., NPCA gave wholehearted support to approval of HR 39 except for recommending changing "preserves" to "parks" to eliminate sport hunting there. For a report on this Association's recommendations about the bill, see page 21.

Field hearings in Alaska scheduled as of this writing follow:

July 5, 9:30 a.m., Bicentennial Building, Sitka
July 7, 9:30 a.m., National Guard Armory, Juneau
July 9, 9:30 a.m., Ketchikan High School, Ketchikan
August 12, 9:00 a.m., State Courts Building, Anchorage

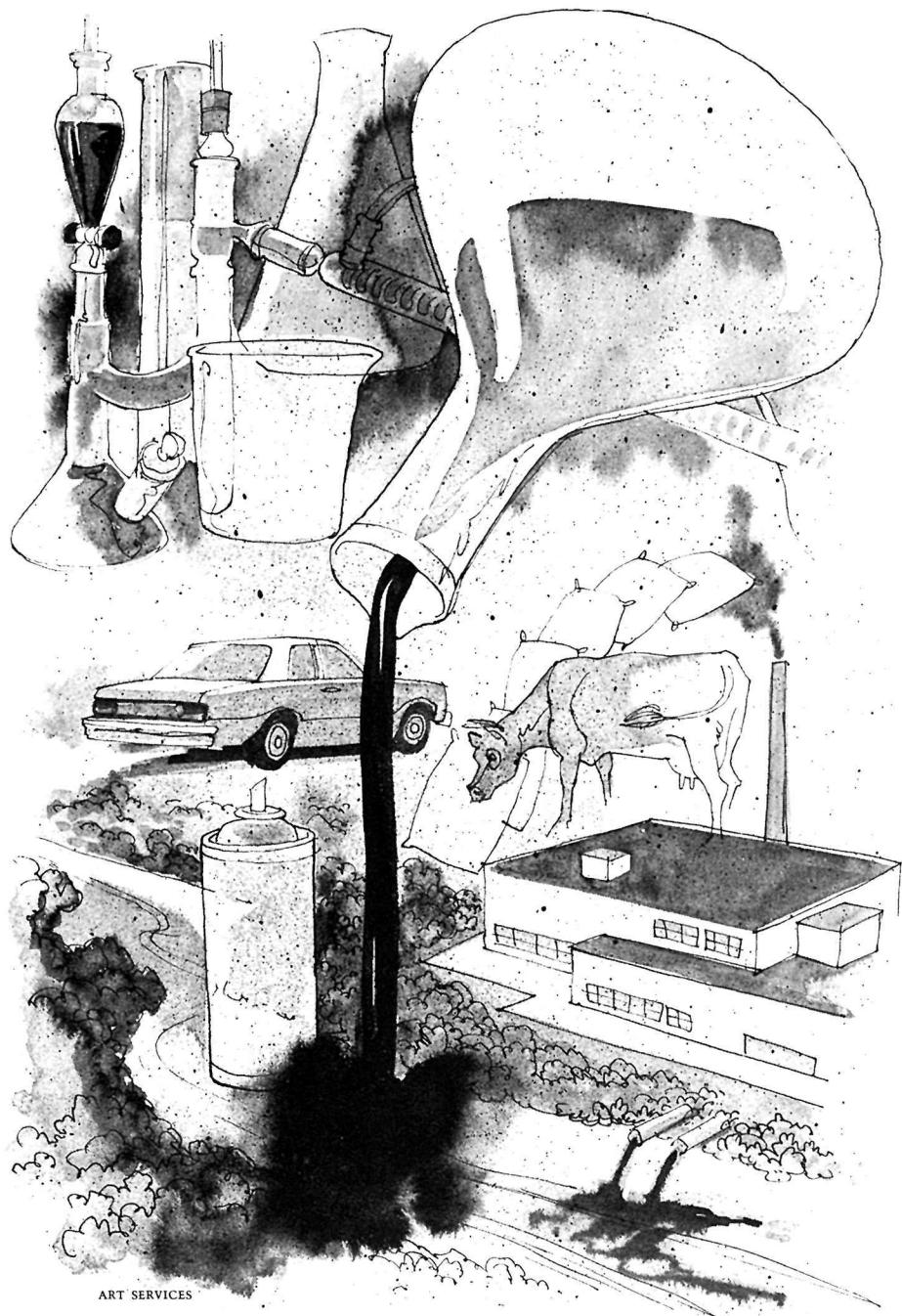
August 20, 9:00 a.m., Hutchison Career Center, Fairbanks

Individuals have been invited to submit written statements or letters for the hearing record to the Subcommittee on General Oversight and Alaska Lands, 1324 Longworth House Office Building, Washington, D.C. 20515.

river but everything about the mood of the wayward explorers who bestowed it. That is why I like it. It conjures up a time when one might be overawed by the sheer breadth of the earth, almost agast at its seemingly inexhaustible horizons. Such a time is pretty well finished now. Jets and interstate highways abridge our sense of limitlessness. To have lived during a time when whole continents lay out of sight and unsuspected is nearly inconceivable. Few places remain that are so vast, so infinitely wild and uncontaminated that one might plausibly christen yet another river in the despair and marvel and disbelief that I suspect was the spirit in which the name "Another River" was chosen. Lake Clark is such a place. ■

Free-lance writer Chip Brown became absorbed with Alaska after spending two summers there climbing and hiking. He also worked for a while on an Alaskan newspaper, the *Homer News*.

The Hazards of Toxic Substances



THE WIDESPREAD environmental pollution, which is often viewed as an unfortunate but inevitable feature of modern industrial society, has recently acquired a still more ominous significance. The problems of contaminated air and water are no longer a matter of primarily aesthetic concern: Scientists now estimate that as much as 90 percent of all cancer is related to environmental factors. Prominent on the list of causative agents are carcinogenic chemicals and other cancer-causing substances which are dispersed throughout the environment either deliberately—food and feed additives, pesticides, and industrial discharges—or inadvertently—a result, for example, of agricultural or urban runoff.

Cancer has become the number-two killer of Americans today; and at its current rate, cancer will develop in 25 percent of the U.S. population. While effective treatments or a cure for cancer continue to elude researchers despite massive expenditures of time and money, it has become quite apparent that prevention of cancer by reducing exposures to environmental carcinogens is a realistic possibility as well as an urgent priority. If the environmental sources of cancer which are being identified every day can be reduced or eliminated, the trend of increasing incidence of cancer throughout the population can be reversed and a major improvement in the nation's health thereby achieved.

Human exposure to carcinogenic agents in the environment is frequently involuntary and unavoidable: In addition to harmful chemicals which pervade much of our diet, not to speak of our drinking water and air, carcinogenic agents abound in the workplaces of many Americans. But voluntary exposures—especially smoking and high consumption of alcohol, beef, and drugs—top the list of factors implicated by epidemiologists studying the relationships between cancer and the environment. Sunlight and natural radiation are also on their list.

Although the precise relationship between these various factors and the onset of cancer has not been ascertained, it is clear that many of the exposures associated with increased incidence of cancer are preventable. Prohibitions on the use of carcinogenic food and animal-feed additives such as Red Dye No. 2 and DES, effective restrictions on industrial air and water pollution, regulation of persistent pesticides, and a coordinated program of pre-market screening of new chemicals to catch such harmful compounds as vinyl chloride, arsenic, and kepone, before their irreversible damage has been done, would go a long way toward achieving cancer prevention.

In addition to their impact as a cause of cancer, toxic substances produce a broad range of other adverse effects; these include mutation, birth defects, reproductive

An effective program is urgently needed to control and eliminate the pervasive toxins that are poisoning our environment and causing human disease

failure, central nervous system damage, and general lowering of resistance to disease. Low-level exposures to toxic chemicals also have a significant effect on fish and wildlife, which means that all facets of the globe's delicate, interdependent ecosystem are being affected—possibly irretrievably.

EFFECTIVE REGULATION: Still a possibility? A complex and overlapping assortment of federal and state laws and regulations has been enacted to deal with environmental pollution. Authority to deal with the specific health-related problems and hazards posed by toxic chemicals in the environment, however, is fragmented among various federal departments, agencies, and commissions. The result is the inadequate protection of the public from exposures to toxic substances.

PCBs are widely used industrial chemicals which in the last decade have been found to be both toxic and ubiquitous in the environment. Primarily because of extensive and unregulated industrial waste discharges into water, PCBs have been detected in high concentrations in river-bottom sediments, fish, and other aquatic and animal species. They have also been found in food-packaging materials and foods of animal origin, especially freshwater fish, poultry, and dairy products. Because of their chemical properties—long persistence, mobility in the environment, and a propensity to concentrate in

fatty tissue—PCBs accumulate to increasingly high levels as they pass up the food chain. As a result, they are now present at high and potentially hazardous levels in fish and other foods consumed by humans.

PCBs adversely affect the health of humans, and many aquatic and land species. Moreover, there is recent evidence that PCBs are carcinogenic in laboratory animals and, therefore, presumptively carcinogenic in humans.

Although the health and other environmental hazards posed by PCBs are now widely recognized, the extent of contamination is so great that reduction or elimination of the problem defies both regulators and technicians. For example, reduction of the "permissible" quantity of PCBs in foods to a safety level for the consumer may require the FDA to prohibit many items of food from being sold in interstate commerce. Such a step, taken in the past because of high levels of pesticide residues in certain freshwater fish, had a devastating impact on the hard pressed commercial fishing industry in the Great Lakes. A similar impact on the Hudson River fishery is anticipated as a result of action taken recently by the New York State Department of Environmental Conservation to prevent the sale of PCB-contaminated fish from the Hudson River. This contamination results from years of discharges by a General Electric plant. In an out-of-court settlement, G.E. recently

agreed to contribute up to \$4 million to help clean the river, but unfortunately such a cleanup is simply not possible at any price in the foreseeable future.

A parallel dilemma faces the EPA [Environmental Protection Agency], which is presently attempting to regulate industrial-waste discharges containing PCBs. The scientific evidence demonstrating the toxicity of PCBs warrants a firm prohibition on all further discharges into water. Compliance with an absolute prohibition is, in fact, technologically feasible within the next two to three years—but the relevant statutory provisions require compliance with 2 prescriptive regulations within only one year. EPA must either ignore the evidence and the potential risk to public health—and issue regulations which can be achieved within the statutory deadline—or implement regulations which may result in the closing of plants and concomitant economic dislocation. A third choice, and the one most often followed in similar circumstances, is not to regulate until ordered to do so by the courts.

Other obstacles to effective regulation of PCBs arise from the fact that, despite voluntary restrictions on the domestic manufacture of PCBs, importation of PCBs from abroad continues unabated. Even a complete prohibition on future discharges of PCBs into water or air pursuant to existing law would not prevent continued importation and consequent environmental pollution resulting from uses not covered by the air and water pollution control statutes.

THE TOXIC Substances Control Act. After five years of debate, the Congress has eliminated many serious gaps in regulatory authority over toxic substances through enactment of a Toxic Substances Control Act (1976). The two principal features of the Act are: comprehensive authority to regulate exposures to toxic substances not presently covered by existing law (such as PCBs); and authority for the EPA to require testing of both existing and new chemicals to determine the nature of health and environmental effects and pre-market screening of new chemicals for adverse effects (such as carcinogenicity) before they can develop into major industrial materials which would be economically disruptive to ban.

FINANCIAL PRIORITIES. Even with the additional authority provided by the Toxic Substances Control Act, the problem of discovering and dealing with the chemical carcinogens and toxicants already present in the environment remains pressing and is not susceptible to simple solutions. The consistent pattern of association between long-term exposures to often minuscule quantities of toxic pollutants and the development of many types of cancer underscores the growing urgency for effective corrective and preventive action.

In keeping with this urgency a shift is needed from the current emphasis on financial support for biomedical research seeking a "cure" for cancer, to increased financing of epidemiological studies

aimed at preventing cancer. As the Department of Health, Education, and Welfare's Forward Plan for Health states:

In recent years it has become clear that only by preventing disease from occurring, rather than treating it late, can we hope to achieve any major improvement in the nation's health. [Heart disease, cancer and stroke] are caused by factors (e.g., the environment and individual behavior) that are not susceptible to direct medical solution.

... It is, therefore, a basic premise of the prevention strategy that much greater attention and resources must be directed at preventing the underlying causes of disease rather than at the disease itself—at controlling cigarette smoking, alcohol abuse, and exposure to toxic chemicals in the environment than at the diseases which they cause. [Italics added.]

The battle for recognition of the environmental origins of cancer and other diseases is beginning to be (but is far from) won; the effort to ferret out and eliminate those sources has hardly begun. We recommend the following action:

- Reorganize for better coordination of the many federal agencies currently sharing portions of the responsibility for dealing with the hazards caused by toxic chemicals. Request pressure from the White House for conscientious, timely, and effective performance.
- Pay special attention to toxic emissions from the combustion of fossil fuels and from synthetic fuel plants. These materials include mercury, lead, cadmium, uranium, and cesium.
- Assure that EPA fully implements and enforces the Toxic Substances Control Act both for new chemicals and for those al-

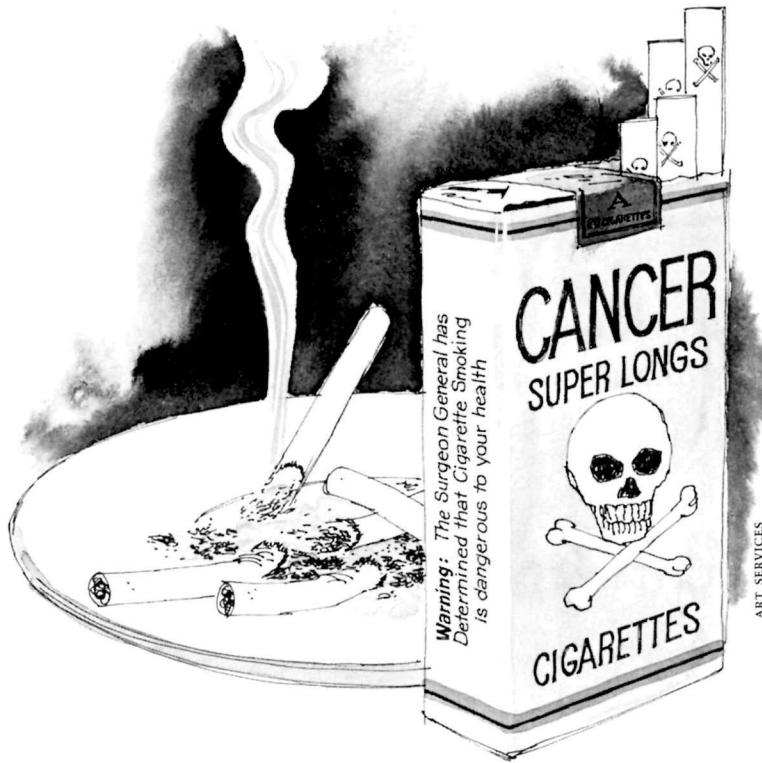
ready in the environment. This program should be given very high priority and full funding to permit rapid filling of the gaps left by lack of regulation in the past.

- Give special research priority to filling gaps in scientific knowledge necessary for evaluating chemicals, including the study of structure-activity relationships, development of short-term tests for carcinogenicity, risk estimators for teratogenesis and mutagenesis, and techniques in behavioral toxicology.
- Shift priorities in the National Cancer Plan from the search for a cure for cancer to prevention of cancer. The National Cancer Institute should be directed to expand both its epidemiological studies and its program for testing environmental chemicals and to complete and public studies already undertaken. (NCI completed experimental work with kepone in 1973-74; prompt analysis and publication of the results might well have averted the kepone disaster of 1975.)
- Give urgently needed support to research on the effects of commercial chemicals on vital organs.
- Establish a national register of birth defects, to permit epidemiological studies to identify environmental teratogens.
- License laboratories conducting experimental toxicological studies and establish minimum standards for acceptable work.
- Initiate an all-out effort to eliminate the single most significant cause of human can-

cer—tobacco smoke. This effort will need to have several component programs including (1) education, (2) elimination of USDA tobacco programs, (3) phasing-out of tobacco farming, (4) an escalating health-threat tax on smoking tobacco, (5) a total ban on smoking tobacco advertising, and (6) a much stronger health warning on packages, printed in the largest letters used on the package. ■

Editor's Note: For a description of the Toxic Substances Control Act and current administrative developments, see page 27.

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JACK CURTIS and Jason, his Seeing Eye dog, climbed out of the car in Muir Woods National Monument parking lot. Jack's father let the boy and the dog take the lead up the gently sloping path winding past the visitors center. This was Jack's first trip to the monument seventeen miles north of San Francisco, and he had eagerly counted off the days to this warm, sunny Saturday in May. Jason was on old territory. Part of his training with Dogs for the Blind had taken place in Muir Woods. He knew exactly where he was going, and as he padded along, he happily sniffed the familiar, exciting odors.

Not far from the visitors center, the Miwok Braille Trail is a small, quiet pocket apart from the often crowded park pathways and far enough from the park entrance that the noise of traffic is muted. Benches along one side of the path provide a comfortable resting place to sniff and listen.

"I'll wait here on a bench for you, Jack," his father said. "Take as long as you want. Jason can stay here with me. You follow along the rope."

Jason left Jack at the first post where the boy picked up the nylon cord that led from one post to the

next. He carefully fingered the Braille legend attached to the post, describing the surrounding plants and other items of interest. Often a string ran from one of the posts back into the foliage. Following several strings with his fingers, Jack explored the serrated edge of a sword fern and felt the fragile, clover-shaped oxalis petals, the slender, thickish leaf of the California laurel, and the rough spongy bark of a redwood trunk.

A warm breeze stirred Jack's hair. Ecstatically, he sniffed the spicy scent of redwood needles, intensified by the heat of the sun beating down on the trees' branches. Nearby he could hear the gurgle of water where Redwood Creek runs close to the trail. A myriad of insects rustled and buzzed and hummed around him.

His quick ears caught the chirpings and twitterings of half a dozen birds. He lifted his face to the sun and murmured, "Gosh, what a wonderful place!"

For Jack this visit was only an introduction to the Miwok Trail, a tantalizing taste of nature's offerings. He returned to Muir Woods many times with Jason and his father at different times of the day and different seasons of the year.

He came to know the park in winter, when a damp chill rises from the ground; in summer, when the cool fog drifts in from the nearby Pacific Ocean; and in autumn when he and Jason can scuff through crisp, dry leaves lying in drifts along the path. Each visit provides new experiences. With his father's help and the keenness of his own senses he has begun to understand the park's ecosystem, each plant depending on others in its community. Jack has learned to follow the life cycle of plants, insects, and birds along the Miwok Trail. He can tell by the sound of the water when Redwood Creek is in spate or at its lowest ebb. When he hears a great horned owl hoot, he knows dusk is falling and it is time to leave.

NAMED FOR THE Indians who inhabited this area in earlier times, the Miwok Braille Trail was established in Muir Woods National Monument in 1974. Although designed specifically for use by the blind and visually handicapped, it is also used by elderly people, by visitors with handicaps other than lack of sight, and by many hikers with no physical handicaps at all. (At the start

of the Three Senses Nature Trail, a similar trail in Yellowstone National Park, a sign suggests that "visitors close their eyes if they are not blind . . . in order to experience the natural setting through their own senses." The day this trail opened sighted walkers were furnished with masks so they could explore on an equal footing with the blind.)

The Miwok Trail has twenty five-foot-high posts, twenty feet apart, joined by a thin nylon rope. Round wooden markers are placed on the rope one foot before a post is reached to alert the walker that a new area is coming up. Each post has two labels, a four-inch by six-inch zinc braille plate and an aluminum alloy plate about three-thousandths of an inch thick containing large print. Both plates bear the same description of the adjoining area. They are mounted on a piece of redwood attached at a slight angle at the top of the post. The slab must be fairly flat, inasmuch as braille is read with the fingertips, but it must be sloped enough for rainwater runoff.

The asphalt-paved, eight-foot-wide trail covers a hundred yards. Though short, it travels through an area of highly diversified foliage.

Open to the sun at its beginning, the trail becomes increasingly shady as it works its way to a cul-de-sac formed by one of the many stands of redwood trees (*Sequoia sempervirens*) in the park. Blind visitors can familiarize themselves with a variety of plants and trees as they follow the cord from post to post.

The cost of establishing and maintaining these trails is relatively so inexpensive that it is hoped that more such trails for the visually handicapped will soon be available. The Miwok Trail cost about \$400, or \$20 per post—a small amount for the amount of pleasure derived by its visitors.

AT PRESENT seven braille trails similar to the Miwok Trail exist on federal and state lands in the United States. The Roaring Fork Braille Trail in White River National Forest, Aspen, Colorado, was the first to be developed. The Touch and See Nature Trail in the National Arboretum, Washington, D.C., and the Three Senses Nature Trail in Yellowstone were dedicated in 1969. Massachusetts' popular Buttonbush Trail lies in the Cape Cod National Seashore at Eastham. Virginia has two such

trails—the Meade Station Trail at Petersburg National Battlefield and the Lion's Tail Braille Trail in George Washington National Forest. This trail has the unique feature of pools where blind visitors, with a rope for a guide, can dip their feet in the water. Finally, the state of California has established the Revelation Trail for the Blind in Prairie Creek Redwoods State Park in Humboldt County fifty-three miles north of Eureka. This level trail, a quarter of a mile long, is partially funded by the Save-the-Redwoods League. A leaflet in braille, describing the walk, is available at Prairie Creek park headquarters.

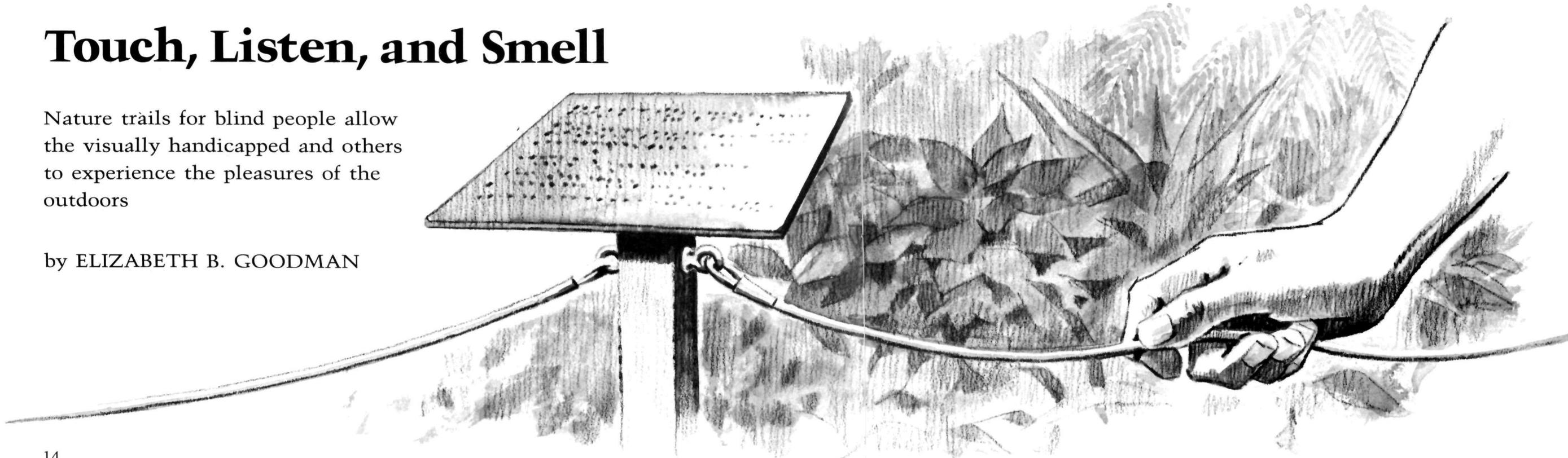
Today more than one million visually handicapped persons live in the United States, but unfortunately relatively few of these people have access to these outdoor trails. Young Jack Curtis is one of the lucky ones who lives close to this outdoor adventure. Young and old who explore and enjoy Muir Woods Miwok Braille Trail echo Jack's words: "What a wonderful place!" ■

Free-lance writer Elizabeth B. Goodman has had her material published in a number of national magazines.

Touch, Listen, and Smell

Nature trails for blind people allow the visually handicapped and others to experience the pleasures of the outdoors

by ELIZABETH B. GOODMAN



Feral animals must be humanely eliminated from the National Park System in order to protect native American vegetation and wildlife

Summary of

NPCA Survey of Feral Animals in the National Park System

THE National Park System was established in 1916 to preserve certain areas in a natural state for future generations. However, the parks have not always been managed in a manner consistent with this goal. One of the most damaging effects on the parks has been from feral animals—domestic animals that have been purposefully or inadvertently introduced into the wild. Feral animals destroy the vegetation in parks, kill native wildlife, compete with native wildlife for food and water, and in some cases even cause soil erosion by changing natural drainage patterns.

NPCA has been deeply concerned with the problem feral animals are causing in the parks. In July 1976 we sent a questionnaire to superintendents of ninety-three units of the National Park System in order to determine why and where feral animals exist and what is being done to solve the problems they cause.

The responses show that the occurrence of feral animals within

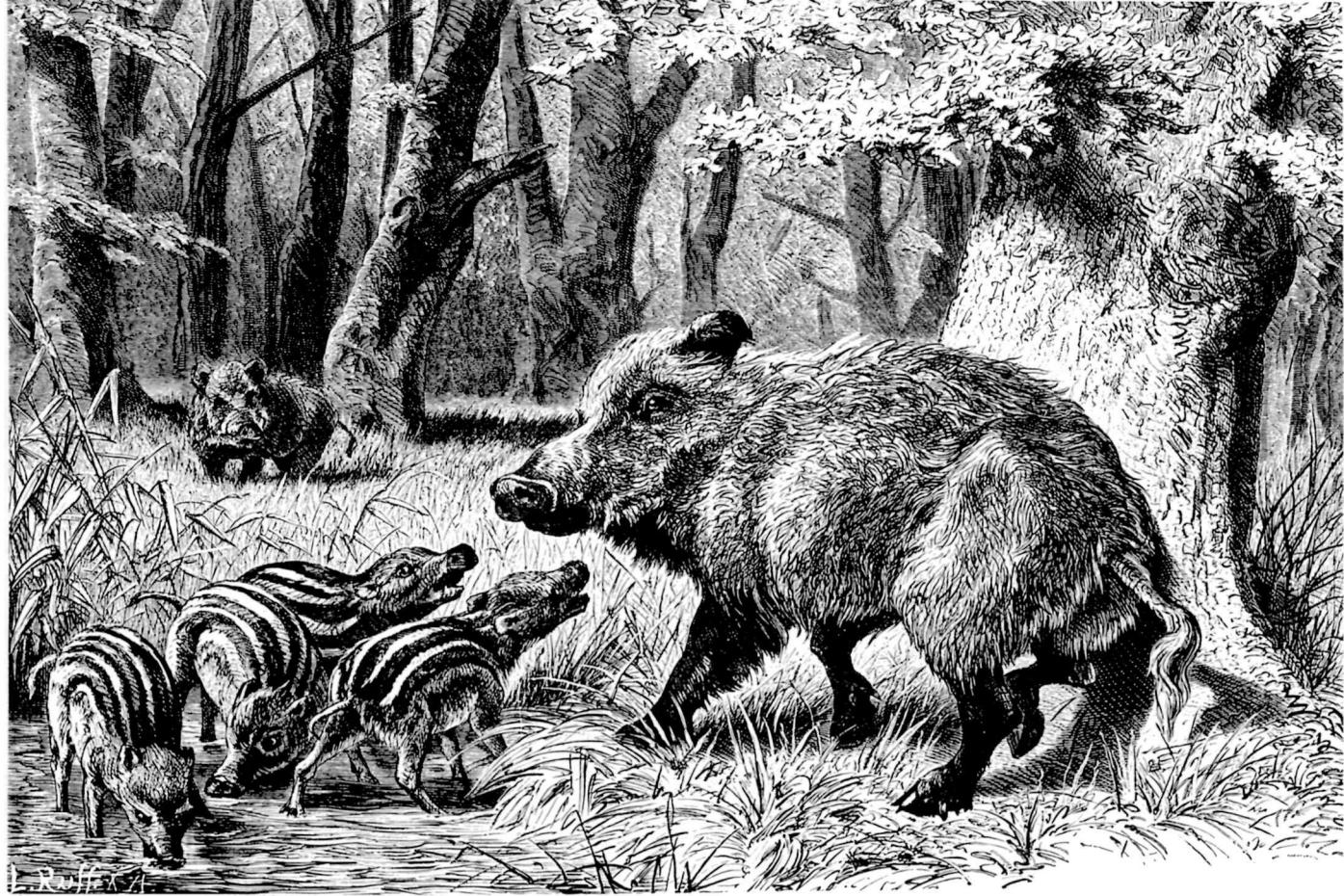
the park system is widespread. Forty-six of the eighty-two parks responding to our questionnaire reported one or more types of feral animals. In addition, several park units reported the existence of nonnative or "exotic" mammals and birds in their areas. (See the table accompanying this article.)

Some feral animals, such as burros and goats, were already on the land before the parks were established; but others, such as dogs, cats, cattle, and horses, occur in the parks because of the carelessness or neglect of park visitors and landowners surrounding the parks and because park regulations have not been strictly enforced.

Thirty-five parks reported no occurrence of feral animals, generally because of the topography of the land, severe climatic conditions, or lack of food within the parks. However, a few parks reported that strict enforcement of regulations or the introduction of man-made barriers had eliminated or prevented the problem. For example, Glacier Bay National Monument, Alaska,

reported that feral animals could be introduced by fishermen and recreational boaters, but because the park strongly enforces its regulations, the problem does not occur. Capulin Mountains National Monument, New Mexico, set aside in 1916, has been protected for many years. Because this national monument encompasses a relatively small area, it was fairly simple to set up man-made barriers along the boundaries of the monument that exclude feral animals. For the majority of the parks, however, feral animal management has been neither so simple nor so effective.

FERAL CATS and dogs were reported in many of the parks. These animals are sometimes accidentally left behind by families visiting the parks. They may escape from cars or stray from homes near park boundaries. Sometimes they are deliberately let loose in the park when the owners become tired of the pets. In many cases, because of their small numbers,



EUROPEAN WILD SWINE, FROM Lydekker

the animals cause no problem and are easily removed from the park. Quite a few parks, however, reported damage by these animals. Cape Cod National Seashore reported disturbances to bobwhite populations by cats. In Golden Gate National Recreation Area dogs attack white-tailed deer and cats compete for food with owls, hawks, foxes, and bobcats. Mammoth Cave National Park also reported dogs attacking white-tailed deer.

The most common type of control for dogs and cats is trapping. Visitors and residents near the parks should be warned that their pets will be destroyed if found running loose. Enforcement of existing leash laws would also alleviate the problem. All pets of park visitors should be checked for identification tags. Many parks prohibit pets in the backcountry, a wise policy that all parks should enforce.

Swine are found in nine national park areas. Russian boar is found in Pinnacles National Monument, Great Smoky Mountains National

Park, and along the Blue Ridge Parkway, and wild boar is found along Natchez Trace Parkway. These boars are exotic species, introduced from their native Europe to provide sport for hunters, and they have spread into several national park units. Most of the damage caused by swine is due to their rooting. This behavior causes soil erosion and destruction of native plants.

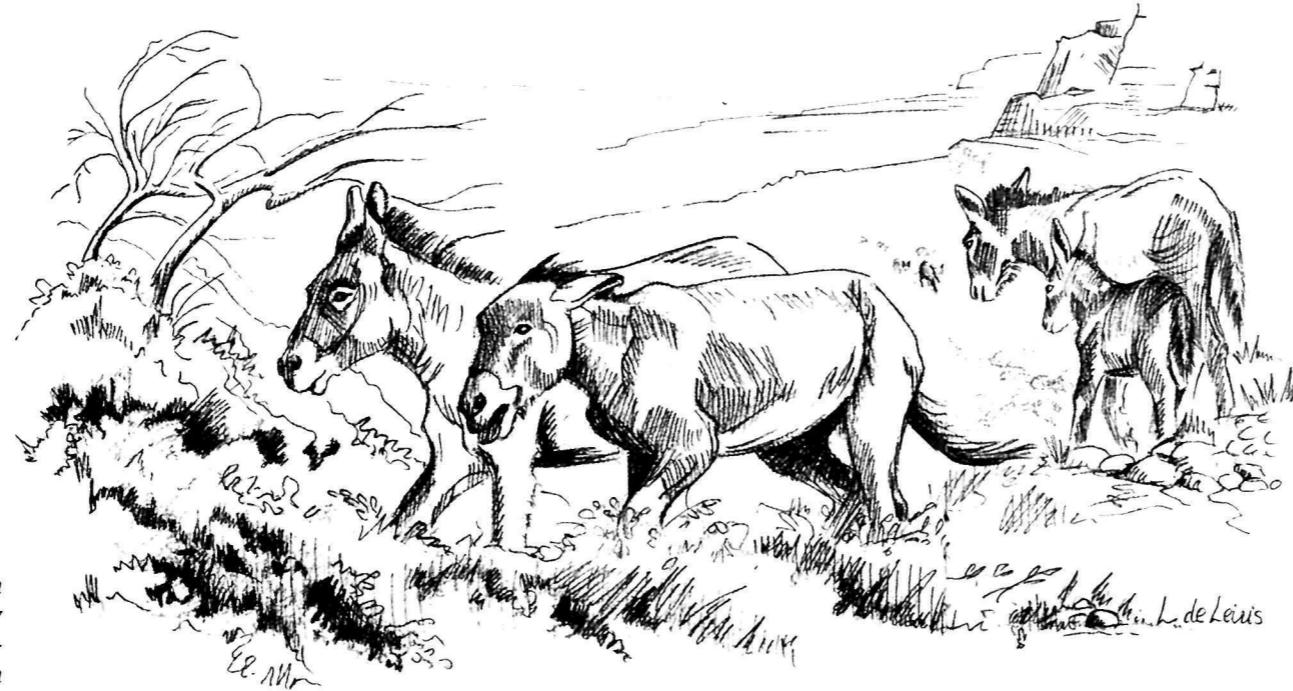
In Gulf Islands National Seashore, feral domestic hogs have eliminated some of the native snake population, and in Virgin Islands National Park, hogs eat the eggs and young of ground-nesting birds. Cumberland Island National Seashore reported that hogs eat the eggs of the loggerhead sea turtle, a severely depleted species proposed for listing under the Endangered Species Act. Current management procedures are predominantly trapping and shooting, although in Haleakala National Park, where the number of hogs is increasing, studies are being done on a combination goat and pig fence that

would provide a more permanent solution.

Five park units reported feral cattle. At Cumberland Island National Seashore they compete for food with the white-tailed deer and remove dune-stabilizing vegetation, thus destroying protective foredunes that prevent flooding of sea turtle nests. A recent Park Service news release from Saguaro National Monument reported that a herd of cattle estimated at forty head is seriously overgrazing a section of the monument. Roundups have not thus far been successful. Shooting seems to be the most likely next course of action.

Dinosaur National Monument reported more than five hundred feral horses, and this number is increasing rapidly. The horses compete with elk and have caused severe range deterioration. An environmental analysis is now being prepared to formulate a plan for control.

Ponies at Assateague Island and Cape Hatteras national seashores have historical significance and are



Nonnative burros cause problems in seven national park system areas. They destroy native vegetation and archeological resources, cause erosion, and compete with native wildlife for food and water.

under a management program consisting of fencing and population and disease surveys. Each year some of the ponies are auctioned or sold in order to keep population levels stable.

THE ONLY OTHER feral animals that cause significant problems within the system are goats and burros. Because of their high reproductive rate and great adaptability, these animals have had a particularly severe effect on native flora and fauna.

The Hawaiian Islands have suffered extensive and serious damage from feral goats. More than 70 percent of Hawaii's native plants, most of which are endemic to the archipelago, are considered endangered, along with close to thirty species of birds that are ultimately dependent on the native flora for their survival. (See the October 1975 issue of NPCA magazine.) The fragility of the Hawaiian ecosystem makes these plants particularly susceptible to damage from trampling and browsing. A Park Service draft environmental impact statement (DEIS) on Hawaii Volcanoes National Park stated that the Hawaiian plants "have been isolated for so long without vegetarian mammals that they have lost all defenses against

browsing or grazing. Hawaiian plants lack thorns, thick bark, bad taste, poisons...." Goats have already caused the extinction of some species of plants and threaten to eliminate more.

The DEIS suggested many control measures but stated that each has problems. Shooting by park rangers is expensive and not very effective. Mass roundups with public participation seem to condone hunting within the parks. Selling the goats would undermine the livelihood of commercial goat traders.

In August 1969 a study was conducted with goat-proof fencing. Within two years 50 percent of the flora within one small enclosure were native, and a species of Hawaiian jack bean, *Canavalia kauensis*, which is completely new to science, started growing there. Outside the enclosure only bare soil and heavily grazed exotic grasses could be found. Fencing was erected in other areas of the park, and the goat population was reduced from an estimated fifteen thousand in 1971 to just over four hundred by January 1977. These statistics clearly show that a strong management plan can control the problem caused by feral animals.

Goats are also a problem in Haleakala National Park, where they

have caused the extinction in the park of the native greensword plant. Previously the goats were controlled by hunting, but this pressure forced them into inaccessible areas. The Park Service is now trying fencing, which has been effective thus far.

Burros were reported in seven park system areas. Organ Pipe Cactus National Monument reported that burros are increasing. They have driven out bighorn sheep, deer, and antelope and have denuded large areas of native plants. Trapping is being used to eradicate the population.

In Death Valley National Monument burros are causing serious problems for the native bighorn sheep. They displace the bighorn at watering holes and compete with it for food. The bighorn population before 1850 was estimated at 4,800; the population now is about 580. Because the area is so dry, man-made watering holes were established. The burros have severed the pipeline twice. Burros also affect vegetation. Indian rice grass, desert spear grass, and galleta grass are greatly reduced and in some places absent because of burro foraging. Between 1969 and 1974, 80 percent of the alkali grass in a particular area was cropped to the roots by burros. The destruction

can be prevented; in one enclosure the native Anderson thornbush increased from 17 percent coverage to 30 percent during a one-year period. Collisions with burros are also causing vehicular accidents in the park. The Park Service has drafted a plan to eliminate the burros over a five-year period by fencing, trapping for removal to adoptive homes, and shooting them.

A recent environmental assessment of Bandelier National Monument concluded that burros not only cause erosion and compete with wildlife for food and water but are also destructive to the archeological resources of the park. Reduction of the population is planned.

The history of the burro problem in Grand Canyon National Park dates back to 1920. In 1932 Chief Ranger J. P. Brooks stated that "overgrazed conditions existed on all areas ranged over by burros. In many places herbage growth was cropped to the roots and some species of shrubbery were totally destroyed." A total of 2,860 burros was removed from Grand Canyon in the period from 1924 to 1969. (This program does not apply to trail mules in the park.) Shootings were stopped in 1969 because of public sentiment. Burros and the

Reported Occurrence of Feral and Exotic Animals

Park Unit	Type of Feral Animal
Assateague Island NS	Cats, dogs, ponies
Bandelier NM	Burros
Bighorn Canyon NRA	Horses
Biscayne NM	Cats
Black Canyon of the Gunnison NM	Goats
Blue Ridge Parkway	Cats, dogs, Russian boars—
Canaveral NS	Cats, pigs
Canyonlands NP	Burros
Cape Cod NS	Cats, dogs
Cape Hatteras NS	Cattle egrets, cats, coypu,* house sparrows,* ponies, rats,* ring-necked pheasants,* starlings*
Cape Lookout NS	Cattle, goats, sheep
Capitol Reef NP	Cats, chukars,* horses
Carlsbad Caverns NP	Angora goats, Spanish goats
Channel Islands NM	Black rats,* European hares*
Chickasaw NRA	Cats, dogs
Cumberland Island NS	Cattle, hogs, horses
Death Valley NM	Burros
Devils Tower NM	Cats
Dinosaur NM	Horses
Everglades NP	Horses
Gateway NRA	Cats, dogs
Golden Gate NRA	Cats, dogs
Grand Canyon NP	Burros, cats, dogs
Great Sand Dunes NM	Hogs
Great Smoky Mountains NP	Russian boars*
Guadalupe Mountains NP	Angora goats, Spanish goats
Gulf Islands NS	Cats, hogs, coypu*
Haleakala NP	Goats, pigs
Hawaii Volcanoes NP	Goats, mongooses,* pigs, rats*
Hot Springs NP	Cats, dogs, pigeons,* rats*
Indiana Dunes NL	Cats, dogs
Lake Mead NRA	Burros
Lake Meredith NRA	Cats, dogs
Mammoth Cave NP	Cats, dogs
Mesa Verde NP	Cattle, horses
Natchez Trace Parkway	Wild boars*
Olympic NP	Brook trout, European skylarks,* European starlings,* mountain goats*
Organ Pipe Cactus NM	Burros
Ozark NSR	Hogs, horses
Pinnacles NM	Goats, Russian boars*
Point Reyes NS	Cats, dogs, deer*
Redwood NP	Pigs
Saguaro NM	Cattle
Shenandoah NP	Cats, dogs
Virgin Islands NP	Cats, donkeys, hogs
Voyageurs NP	Cats, dogs
Yellowstone NP	Cats, dogs
Yosemite NP	Cats, dogs

NOTE: Feral animals are domesticated animals that have escaped from domestication and are living as wild animals. Exotic animals are wildlife not native to the United States.

*Exotic.

NL=National Lakeshore
NM=National Monument
NP=National Park

NRA=National Recreation Area
NS=National Seashore
NSR=National Scenic Riverway



Feral goats are an especial problem in Hawaii Volcanoes National Park and Haleakala National Park, where they have caused the extinction of some species of native plants and are threatening to eliminate others.

damage they cause are again on the increase.

Grand Canyon National Park has done extensive studies on burros. In a recent study in which burros were excluded from one area and allowed to roam in another, the control plot showed 80 percent cover; the impact plot, only 20 percent. The control plot had a density of 128 small mammals per acre; the impact plot, only 32.6 per acre. In November 1976 an environmental assessment was released on burros in Grand Canyon National Park. This report stated that a five-year program consisting of shooting and exclusion pens will be started to control the burros and bring the park back to a more natural state.

Feral burros have caused an emotional controversy. Their protectors recall the days of the Wild West when the old prospector would lead his trusty burro down the trail, and they opposed removal of these animals because of their historical significance. Champions of the burros also charge that removal of the burros would be inhumane; in fact, methods of eradication were not always humane in the past.

Thus, Congress, recognizing that

"wild free-roaming horses and burros are living symbols of the historic and pioneer spirit of the West," passed legislation in 1971 to protect these animals. The legislation allows for population reduction methods only when overpopulation causes disease or starvation, or when reduction is necessary to preserve habitat or to remove old or sick animals. Only the Secretary of the Interior can make such a determination, and the animals must be removed "in the most humane manner possible." This legislation applies to U.S. Forest Service and Bureau of Land Management lands; National Park Service lands are exempted. Thus, removal of wild horses and burros from the national parks will not threaten the overall existence of these animals, which is guaranteed on other public lands.

NPCA BELIEVES that feral animals must be eliminated from National Park System areas in order to preserve the natural environment. Removal should be conducted in the most humane manner possible, by a combination of strict enforcement of existing regulations, live trapping, boundary fencing, and constant study and

surveillance to determine the effectiveness of the program. In large areas or with large populations, shooting feral animals may be the only reasonable form of eradication. Removal by shooting should be used only if other methods cannot succeed or are determined to be less humane.

The 1975 Management Policies for the National Park Service state: "Control or eradication of noxious or exotic plant and animal species will be undertaken when they are undesirable in terms of public health, recreational use, and enjoyment, or when their presence threatens the faithful presentation of the historic scene or the perpetuation of significant scientific features, ecological communities, and native species. . ." NPCA urges the Park Service to implement this policy to its fullest in order to achieve the preservation that these park lands were established to maintain. Furthermore, we urge our friends in wildlife preservation and humane organizations to recognize that the conflict between feral animals and native flora and fauna must be resolved in favor of native species. The national parks must be restored to their natural state. ■

NPCA at work

ALASKA D-2

NPCA Urges Approval of Alaska National Interest Lands Conservation Act

Do you have doubts about whether people in Chicago who will never see the Arctic tundra bring forth its July colors or the caribou migrate in vast herds care about these natural treasures? Look at the figures for recent congressional hearings on Alaska land proposals held in Chicago and other cities.

Witnesses—including several NPCA members as well as the NPCA president—are flocking to the hearings to express their views on the future status of millions of acres in the state. (This Association supported the bulk of bill HR 39 in invited testimony.)

At stake is the future of tundra lands, coastal fjords, massive ice fields and glacial systems, alpine peaks, and some of the world's most beautiful lakes, cleanest rivers, and most bountiful wildlife populations.

The House Interior Subcommittee on General Oversight and Alaska Lands began the hearings on April 21 in Washington, D.C. Subcommittee chairman John Seiberling (D-Ohio) originally scheduled four days of hearings; but because of the large number of witnesses, he extended the hearings to seven days. More than 340 persons signed up ahead of time to testify at Chicago hearings, and the subcommittee had to arrange simultaneous hearings to accommodate the crowd on May 7. Hearings in Atlanta also were packed, and at press time scheduled

hearings in Denver and Seattle promised to be popular. This month the subcommittee heads to Alaska.

All this activity is geared to a fast-approaching congressional deadline. Under the 1971 Alaska Native Claims Settlement Act, Congress authorized the Secretary of the Interior to set aside key public lands and to consider these and other federal lands for possible inclusion in the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, and National Forest System.

Congress gave itself until December 1978 to decide on permanent disposition of the public lands in question, which are now administered by the U.S. Bureau of Land Management. Meanwhile, the same act gave Eskimos and Indians some 45 million acres of public land and set up a \$962.5-million fund for natives. Congress had already provided generously for state interests in 1958 by giving the new state of Alaska the right to choose 103 million acres from the federal domain—the largest state grant ever. Thus, the proposals now under consideration represent lands that belong to all citizens of the United States. And the overwhelming response to the recent public hearings reflects the concern of thousands of those citizens—many of whom will never visit Alaska—for protecting these outstanding resources.

At this point the subcommittee is

focusing on two opposing legislative alternatives. HR 39, a bill introduced by Rep. Morris Udall (D-Ariz.) and generally supported by conservationists, calls for protection of about 116 million acres of land in the four federal conservation systems. The other bill, a "fifth system" proposal supported by the three Alaskan Republican officials, disregards the principal objectives of the previously mentioned 1971 law.

The purpose of section 17 (d) (2) of the Native Claims Act is to preserve public lands in Alaska that have special features: abundant or unusual wildlife, wilderness, critical wildlife habitat, and scientific or cultural resources. Yet the state proposal does not provide for a single park or wildlife refuge at the onset.

Sen. Ted Stevens (R-Alaska) launched the D.C. hearings with a statement supporting the "fifth system" proposal, which he is promoting along with Governor Jay Hammond and Rep. Don Young (R-Alaska), the subcommittee's ranking minority member. Reflecting a strong opposition to HR 39's "extremist" land "lockup," their proposal is extremely lax in terms of protective land management. Under the guise of being creative and flexible, they have proposed future classification of 25 million acres as national parks, forests, and fish and wildlife areas; but they advocate delay

These moose are swimming in an unnamed lake of the Brooks Range in the proposed Noatak NPS unit.

M. WOODBRIDGE WILLIAMS



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NPCA at work

in the actual land transfer until the year 2000.

The purpose of the delay is to allow time for more resource studies; during the interim period, the 25 million acres of "core areas" would be open to mineral exploration and other developmental pressures.

Fifty-five million acres classified as "buffer zones" would constitute part of the new "fifth system" managed by a proposed Alaska Land Classification Commission. The commission proposal is an attempt to integrate the federal, state, and private interests into a full-time body to oversee management of core areas, buffer-zone areas, and lands voluntarily dedicated to cooperative management by the state and private land owners. In contrast to HR 39, this proposal is based on the concept of multiple-use management.

That is, supporters of the "fifth system" plan are attracted by its lack of restrictions on development of

Alaska's resources, whereas NPCA and other supporters of HR 39 believe there is a need to balance great energy and development pressures by protecting key natural areas. The Stevens proposal is endorsed by powerful logging companies, oil and gas corporations, organizations interested in hardrock mineral exploitation; and a committee known as CMAL, Citizens for Management of Alaska Lands. This coalition is pushing the fullest possible economic development.

As the principal national conservation organization concerned with the protection of our national parks and monuments, NPCA testified by invitation of the subcommittee on these important questions. This Association has a long history of concern for Alaskan public lands. NPCA President A. W. Smith, assisted by T. Destry Jarvis, Administrative Assistant for Parks and Conservation, spoke on behalf of NPCA in support of HR 39. Smith,

SOLID WASTE

Government Bans Sale of Throwaway Bottles in Parks

As of June 1, 1977, beverage container sales at most facilities in national parks will carry a deposit of at least 5 cents each and will be restricted to returnable containers.

A National Park Service representative explained that even though the relevant EPA solid waste guidelines on beverage containers will not be mandatory until September, the agency has directed park superintendents to comply with both the letter and spirit of the regulations during the summer months, when most NPS units experience peak visitation. The Park Service may make exceptions for parks such as Big Bend in Texas that do not have to handle their heaviest crowds in the summer. However, all facilities in NPS units as well as all other federal facilities under the jurisdiction of the Interior Department will be in compliance by September.

An EPA test program that was started at Yosemite National Park, California, in summer 1976 met with great success. Seven out of ten containers sold at the park are now returned there. Yosemite Park and Curry

Company, which volunteered to do the test run for EPA, reports that when returning cans was a purely voluntary effort, the company recycled only about one ton of aluminum per year. During the test period of the new mandatory deposit and refund system, a ton of aluminum cans was recycled per week. The program has been able to operate on a break-even basis financially, taking into consideration the scrap value of recycled containers.

NPCA has long advocated such programs both in the national parks and at other federal facilities. Although the EPA guidelines apply to all federal facilities, EPA has given the head of each federal agency the power to make the final determination about the ability of that agency to comply. When the guidelines were first proposed, NPCA urged EPA to make such determinations and also suggested banning detachable flip-top or pull-top tabs.

Nevertheless, the present regulations represent a significant step toward solving the serious solid waste cleanup problems of our national parks and other natural areas. ■

who has visited many of the natural areas in Alaska, observed that HR 39 represents a "well-balanced integration of many private and public interests concerned with the good management of public lands in Alaska: parks, forests, wildlife, scenery, recreational resources, cultural and archaeological treasures, energy and mineral production, and the economic development of Alaska, as well as the protection of its fragile ecosystems."

NPCA emphasized that one important purpose of HR 39 is protection of the complete ecosystems represented in the extensive acreage under consideration. Boundaries are drawn to encompass total areas: entire watersheds, migrating wildlife populations, and critical wildlife habitats. This approach shows foresight and would also be beneficial to the way of life and cultures of native peoples.

Preserving distinct traditional lifestyles becomes increasingly difficult,

especially for natives who rely on hunting and fishing for their livelihood. Accordingly, in our testimony, NPCA supported HR 39's efforts to protect subsistence hunting, properly defined, in the units proposed for addition to the conservation systems.

President Smith explained that "this decision represents a major departure for NPCA from its established opposition to hunting in the national parks except within national recreation areas. Our established opposition deals only with sport hunting, and if the distinction is kept quite clear along the lines of the pending legislation, no violence can be done to established traditions of national parks management. Indeed, the practice of subsistence hunting, as understood by the native cultures, can well be looked upon as part of a natural ecosystem which has sustained itself in Alaska for something like 10,000 years and which has proved itself compatible with the sta-

bility and diversity of both wildlife and human populations."

NPCA expressed reservations about the Udall bill's proposals for the proposed Yukon-Charley, Chisana, and Noatak national preserves. Under HR 39 the national preserve designation would open these units to sport hunting of various species—possibly including Dall sheep, caribou, grizzly, moose, and other animals. NPCA differed with other conservation groups by recommending that these three areas be reviewed and included in the full national park category, a classification that traditionally would prohibit sport hunting.

However, NPCA fully endorsed the bill's other proposals for additions to the four conservation systems and its policy of designating all additions to the park, wildlife refuge, and wild and scenic river systems [as well as certain national forest lands] for protection as national wilderness areas.



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Many Alaskans presented their views on various aspects of the native claims settlement. Discussions focusing on subsistence lifestyles indicated the complexity of unanswered questions about native participation on advisory boards, access rights, fish and game management policies, and many other details.

Interior Secretary Cecil D. Andrus delivered a statement before the subcommittee on April 25 emphasizing the need to provide lasting protection for some of the remarkable natural and cultural areas in the forty-ninth state.

He urged Congress to proceed cau-

tiously when dealing with these national lands to prevent irreversible actions. In response to questions from Rep. Udall, Andrus said the Interior Department will not endorse the so-called fifth system proposal, and he personally feels that its sponsors "are asking for a lot of control over land that belongs to everyone."

The Secretary made no specific recommendations to the panel, but he said the department is considering new alternatives for dealing with the d-2 lands. One hypothetical example presented was a core-area national park in the Lake Clark area surrounded by a

national preserve in which hunting and mining would be allowed. The park might include the areas with the highest preservation values, such as headwaters of salmon streams and caribou calving grounds. This alternative arrangement would clash with HR 39's wilderness designation for the entire 116 million acres. Mineral extraction, pipelines, and transportation developments would be restricted in wilderness areas. The Interior approach hopes to allow flexibility within the framework of the existing four management systems, making any new systems un-

Continued on page 26

Getting Involved

Dear Member:

As a newcomer to your Association staff and to the world of practicing environmentalists, getting involved has a very personal and ubiquitous meaning to me.

It means the expertise and experience that exists in your Association staff. How can it be kept intact and evolving? A couple of years ago the staff made an extensive study into the adequacy of financial support to the National Park System units and found some gross inadequacies. This finding was dramatic enough to attract national attention, and the voice of your Association was heard—with desirable results. We continue to work for more funding and personnel for the Park Service. But this is old news to many of you. What is not old is the experience and stature gained by the staff.

Of course, "Getting Involved" for an administrator means complete immersion in the numbers game—cash flow, membership statistics, performance measures of our mass mailing efforts, and more. These are cold numbers on mere pieces of paper; but with a bit of imagination they take on meaning, because people are behind all those numbers—*individuals* like yourself. With this kind of perspective, the numbers and papers become a bridge between you and me. Not a very good bridge, perhaps, but the best one we have.



YOU ARE INVOLVED. Every month membership renewals inch upward, until the April 1977 results reached more than 70 percent. Finally, more new memberships and renewals are coming in at higher rate categories. This is the highest compliment you can pay your staff; it tells us that we are doing the things that most of you are interested in having us do.

Another set of numbers, however, represents a challenge and opportunity to every one of us—members and staff. Our regular membership now numbers about 40,000 with another 3,000 or so active and valued contributors. Total visitations to National Park System units in 1976 were 268 million. In that wide disparity of numbers, there are bound to be at least another 43,000

people who share our interests; people who recognize the value of the parks and who have a deep and abiding interest in finding those same tangible and spiritual resources awaiting them ten years from now and awaiting their great great grandchildren a hundred years from now; people who are interested in seeing more Americans enjoy these resources each year, while yet reducing the depredations that seem inevitable with increasing numbers of people. These considerations do not have to be incompatible, given careful and knowledgeable evaluation of what is being done and what can be done. The opportunity and challenge that face us instantly, however, are to add these "other 43,000" to the ranks of NPCA membership. This kind of added support is essential if the NPCA staff is to maintain the momentum and stature to successfully carry out your trust.

So enjoy your visit to a national park this summer; but if in your travels you encounter someone who was a little disappointed in the park visit or enjoyed it to the point of concern for its future preservation, he or she may be one of the "other 43,000." I'll look for you in the numbers. In the meantime, carry a magazine membership application form in your "ready pocket."

Sincerely,
Mearl Gallup
Assistant to the President for
Administration

NPS & LWCF APPROPRIATIONS

NPCA-Backed Funding Program to Boost Park Staffs

NPCA supported increased funding for the National Park Service in invited testimony before a House appropriations subcommittee in late April. In other recent action with significance for park preservation, NPCA supported an increase in the ceiling of the Land and Water Conservation Fund, upon which the Park Service depends for funds to acquire lands.

These actions are part of an extensive, ongoing NPCA program to document and alleviate problems throughout the National Park System that can

be traced to insufficient funding and personnel.

During the past session of Congress NPCA played a leading role in publicizing such problems around the nation, and these efforts contributed directly to the Ford Administration's proposal for a \$694-million Land Heritage Program. The Carter Administration has supported the bulk of that program but shortened the program's funding period from ten to five fiscal years, counting a Fiscal Year (FY) 1977 supplemental appropriation request of

\$96 million for construction and maintenance. In addition, the program calls for 1,000 new permanent personnel slots for NPS.

Congress recently authorized FY 1977 supplemental appropriations that include \$90 million for construction and also enable NPS to hire the new employees.

The second year (FY '78) installment for the construction portion of the proposed heritage program would be \$91 million. Appropriations requested for NPS for FY 1978 total \$556 million, an

NATIONAL PARKS SAMPLER *Allegheny Portage Railroad*

GETTING THERE: 137 kilometers (85 miles) east of Pittsburgh on U.S. 22; visitor center 3 kilometers (2 miles) from Cresson, Pa.

GETTING IN: Free.

WHERE TO STAY: Lodging, meals in Cresson, Duncansville, Altoona, Johnstown. Fee camping at Prince Gallitzin and Blue Knob state parks.

WHAT TO DO: Museum, slide shows and living history programs, picnicking, self-guided trails. Near Johnstown Flood National Memorial.

MORE TIPS: Superintendent, NPS—Western Pennsylvania, P.O. Box 247, Cresson, PA 16630.

From the vantage point of Mr. Lemon's House, where travelers stopped for food and lodging at the summit of the old Allegheny Portage Railroad, you can best appreciate an engineering feat that local promoters in Pennsylvania once claimed rivaled the pyramids. You will be standing atop the Allegheny Front. Here it is easy to see how the mountains were—at least in the 1820s—a formidable roadblock in the path of farmers and merchants seeking a route connecting Philadelphia with Pittsburgh and of an infant nation looking west. Spurred by heated competition from New Yorkers who had constructed the Erie Canal, Philadelphians considered plans for a water route. But to reach the summit of Allegheny Mountain, a canal barge would have to be lifted 1,380 feet above the canal basin at Hollidaysburg in the east and then lowered 1,140 feet down to the canal basin at Johnstown in the west. So they decided to build a "por-



THE LEMON INN BY GEORGE STORM, CA. 1871

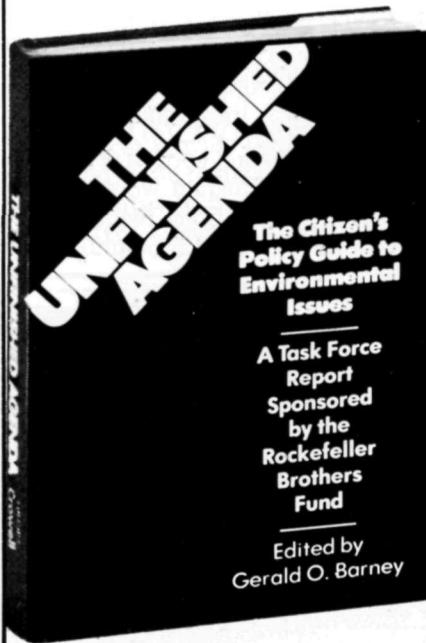
tage" railroad connecting canals at those towns. The railroad was a staircase—a series of ten inclined planes, five on each side of the mountain. Massive stationary steam engines at the top of each inclined plane used ropes and later cables to raise and lower the cars—which sometimes held canal boats. Horses and then locomotives pulled cars on the level stretches of the staircase. Pioneers heading for the lush Ohio Valley rubbed shoulders with merchant barons, senators, and the likes of Charles Dickens, who enthusiastically described riding along the heights of the mountain "like a whirlwind" while gazing from a "giddy precipice" into the treetops of the valley below. But the portage railroad presented problems of convenience, safety, and finances; by 1855 the Pennsylvania Railroad had made it obsolete. Today trees have reclaimed the right-of-way, and moss buries the "stone sleepers" that formed the foun-

dation for the rails on the levels. The Conestoga wagons hitched outside the Lemon House are missing, but the tavern now serves as the visitor center for the national historic site. There you can visit the museum, watch a slide show or historical play on railroading, and then set out on nature trails to explore excavated remains of the railroad and engine houses and to see one of the few preserved skew arch bridges. Along the grass-covered trace of Incline 6, picture yourself sitting with all your earthly belongings in a railroad car that is grinding and rattling foot by foot up a steep mountain—dragged by only a single hemp rope! Follow the trail to the stone quarry for a demonstration of stonemasonry and relive the journeys of the sweating men and the work horses who had to pull the heavy blocks to the railroad bed. Above the sounds of today's highway traffic you will almost hear the roar of locomotives over the buried stone sleepers.

NPCA at work

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Continued from preceding page

increase of \$177 million over 1977. This amount includes \$143 million for construction and maintenance projects and \$323 million for operation of the National Park System.

Although many construction and maintenance projects in the budget proposal are desperately needed to restore proper standards of maintenance and management, NPCA noted that the subcommittee should carefully review the projects because some of them are inappropriate. For instance, the Park Service requests \$5.73 million for construction in Gateway National

Continued from page 24

necessary. After continuing study and analysis, the department will report on the issue in September.

Field hearings in Alaska will better equip subcommittee members to exercise judgment in making difficult decisions about how to provide for the various needs of future generations.

Recreation Area, New York, even though the final master plan for that NPS unit is still in preparation. Public hearings have shown that many aspects of the NPS draft plan for Gateway have been controversial.

NPCA testimony emphasized that the Administration's appropriation request does not adequately provide for the need to accelerate both transportation studies and implementation of public transportation systems in many areas of the park system. This Association also recommended increasing the request for a \$35 million appropriation from the Historic Pres-

You Can Help: NPCA acknowledges and appreciates the time and effort of hundreds of people who have participated in the hearings.

If you have been unable to express your views about this historic undertaking by attending a public hearing, you can submit written statements or letters for the hearing record to the



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ervation Fund to the full \$100 million ceiling authorized by Congress in 1976. This newly created fund provides historic preservation grants-in-aid to the states.

NPCA endorsed full funding for the Land and Water Conservation Fund at the current authorized level, \$600 million, which would provide a Park Service share of \$143 million as well as monies to the Forest Service, Fish and Wildlife Service, and states for outdoor projects. This appropriation would enable the Park Service to buy land in thirty-one areas. However, even a larger amount is needed to liquidate

the backlog of authorized acquisitions. Otherwise, some outdoor areas will be lost to adverse land use practices, and prices will escalate. In a separate statement submitted on invitation to the Interior parks subcommittee, NPCA supported HR 5306, a bill to raise the LWCF ceiling to \$900 million starting in FY 1978. The bill would require that all presently authorized land acquisition be completed within three years of the date of enactment. This provision would help alleviate a problem that crops up again and again—the existence of detrimental land uses on private inholdings within parks. ■

General Oversight and Alaska Lands Subcommittee, 1324 Longworth House Office Building, Washington, D.C. 20515.

Upcoming hearings in Southeast Alaska are as follows: July 5, 9:00 a.m. Bicentennial Building, Sitka; July 7, 9:00 a.m., National Guard Armory, Juneau; and July 9, 9:00 a.m., audi-

torium of Ketchikan High School, Ketchikan. Hearings scheduled as of this writing in other parts of Alaska include: August 12, 9:00 a.m., State Courts Center, Anchorage; and August 20, 9:00 a.m., Hutchison Career Center, Fairbanks. Notify the subcommittee by July 29 if you want to testify at the latter two public hearings. ■

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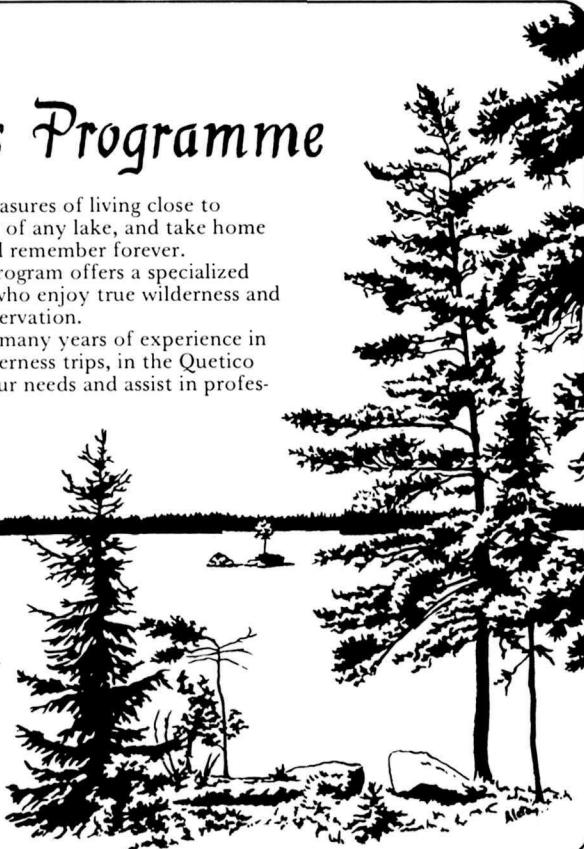
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WILLIAM J. WHALEN New NPS Director Named

At press time Interior Secretary Cecil Andrus had just announced selection of two NPS career employees with experience in urban parks as director and deputy director of the National Park Service.

The new director, William J. Whalen, has been general manager of the Bay Area National Parks in California (Golden Gate National Recreation Area and Point Reyes National Seashore). He replaces Gary Everhardt, director since January 1975.

Ira J. Hutchison was scheduled for appointment as deputy director. Hutchison has been superintendent of Gateway National Recreation Area in New York for several months and before that was superintendent of National Capitol Parks East. ■

TOXIC SUBSTANCES Will EPA Do the Job?

Although President Carter's May 23 environmental message to Congress emphasized the importance of effective implementation of the Toxic Substances Control Act of 1976, critics of the Environmental Protection Agency warn that a lack of enforcement could undercut the new law. Meanwhile, EPA plans to release revised reporting regulations this month.

The law aims at providing EPA with broad powers in order to protect public health and the environment from dangerous chemicals. (See page 10.) It enables EPA to prohibit or regulate the production, distribution, disposal, or use of any chemical substance that may pose an unreasonable risk. The agency can require premarket notification for new chemical compounds or new uses of existing chemicals and selective testing of new compounds and significant new uses. It can also require labeling about possible hazards with use. ■



A key provision in the act empowers the government—for the first time—to obtain information it needs to categorize substances and their uses according to potential hazards. This information includes chemical names and uses, production statistics, by-products, disposal data, and data on human exposure and health effects.

Therefore, some environmentalists were upset when EPA published proposed reporting regulations in March

that would merely require manufacturers to list the chemicals they produce. Other types of information are essential, they contend. For instance, in order for EPA to set priorities for agency action, information on how many people are being exposed to a chemical is crucial.

However, at press time EPA officials said they would revise their proposal for release in July and would probably require information on locations and

production. Using manufacturers' responses to a recently published "candidate list" of 30,000 chemicals, EPA wants to publish an inventory that will provide a more solid basis for requiring manufacturers to notify EPA about new chemical plans. The agency says that rather than requiring lengthy information on all 30,000 chemicals now, it wants to expedite preparation of a smaller "risk list" for priority attention. ■

LAND USE

The Sanibel Story & a Source Book on Legal Rights

Sanibel Island, an 11,000-acre barrier island on the Gulf coast of Florida in Lee County, attracts visitors as a famous treasure trove of shells. But the island has a fragile ecosystem. On November 5, 1974, the citizens of Sanibel Island took their destiny into their own hands and began what became a land-use planning example for the nation.

They voted to incorporate the island as a city. Until that time Sanibel was governed by the Lee County Board of Commissioners. Under that government Sanibel had been zoned to allow a population of more than 90,000. (Currently the peak season population is 12,000.) Developers would have moved in to construct condominiums

on the frontal dunes, and wetlands would have been converted into golf courses.

But through the new city government the citizens of Sanibel elected to control growth on the island with the development of a reasonable land-use plan. They selected the Philadelphia planning firm of Wallace, McHarg,

conservation docket

PARK LEGISLATION

Santa Monica National Recreation Area: HR 3468, introduced by Rep. Glenn Anderson (D-Calif.), would authorize a study of the feasibility of establishing a national recreation area of 100,000 acres on existing federal land in southern California. The land now comprises a portion of Camp Pendleton Marine Base. No committee action was scheduled at press time.

Manassas National Battlefield: On June 6 the House passed HR 2437, a bill introduced by Rep. Herbert Harris (D-Va.) that would expand the present NPS unit by about 1,800 acres. Congressmen did not follow the recommendations from conservationists to add to the park land including the Marriott tract that was originally planned for a theme park development. Conservationists have effectively blocked Marriott's development for three years, but including the land in the park is deemed essential to protect it from other incompatible development. Although the Civil War Roundtable, a noted historical organization, has recognized the significance of the Marriott tract, the

Office of Management and Budget is opposing inclusion of this area in the bill, claiming that it is not qualified for addition to the Park System. Although there has been no Senate action, House action was anticipated at press time.

Chattahoochee River National Recreation Area: A bill introduced by Rep. Elliott Levitas (D-Ga.) to designate a forty-eight-mile national recreation area along the Chattahoochee River in Georgia has been approved by the House Parks and Insular Affairs Subcommittee, but no further action was scheduled on HR 3173 at press time by either the House or the Senate.

Pine Barrens National Ecological Reserve: HR 6625, introduced by Rep. James Florio (D-N.J.), would preserve the ecologically significant Pine Barrens in southcentral New Jersey. This quiet and remote unbroken forest of pine and oak laced with waterways has survived within the nation's most populous state. Scientists come from around the world to study the many rare and unusual species that thrive in the acidic water and sandy soil of the barrens. The Pine Barrens area leads

the nation in blueberry production and is third in cranberry production. Covering 970,000 square miles, the area provides opportunity for recreation for an urban population. "The Pine Barrens are critical," Florio says. "They overlie the major part of an aquifer which stores some 17.7 trillion gallons of water—an amount equal to ten years of rainfall. But because of the highly porous soil and the shallow depth of the water, it could be easily polluted should unrestrained development take place." The bill would authorize the Secretary of the Interior to acquire up to 50,000 acres of ecologically critical land and transfer it to a newly created state management commission. HR 6625 would set up a prototype for a new system of "greenline" parks. That is, the critical land in public ownership would be surrounded by a larger area in which land uses would be carefully controlled by state and local governments with federal oversight, funding, and technical assistance. Hearings concerning the proposed Pine Barrens National Ecological Reserve are expected in the House in late summer.

Roberts, and Todd as consultants on zoning, codes, and other regulations. The Conservation Foundation was selected to assist the city by providing a detailed description of the natural systems of Sanibel and by suggesting means for conservation of natural resources.

The Conservation Foundation recently published that report in a 303-page volume entitled *The Sanibel Report*. Not only is the report a detailed look at the natural systems of Sanibel, but it also presents a basic case study of how the carrying capacity of a natural system can be determined and then used in formulating a comprehensive land-use plan—lessons that could be applied to countless small communities whose ecosystems impose natural limits to growth. The report may be obtained from The Conservation Foundation, 1717 Massachusetts Ave., N.W., Washington, DC 20036. Pay-

ment of \$9.90 (which includes postage and handling) should accompany your order.

Another useful land-use planning resource is a legal handbook recently published by the Natural Resources Defense Council. *Land Use Controls in the United States* explains how existing laws affect the use of land and what individuals or groups can do to protect the environment.

The 362-page book focuses—in clear and simple terms—on federal legislation but also discusses state, regional, and local land-use controls. Each chapter includes a section on citizen action that discusses how citizens can participate in the implementation and enforcement of land-use laws. The book is available in paperback for \$7.95 and hardcover for \$15.95 and can be purchased in bookstores or ordered from NRDC, Box B, 15 W. 44th Street, New York, NY 10036. ■

OTHER ENVIRONMENTAL ISSUES

Strip Mining: At press time the House and Senate had passed bills to regulate strip mining, and optimistic observers predicted that a compromise version would reach the President before July. Both bills would work through programs of federal-state cooperation and require that land be returned to approximately its original condition. Legislation would impose a tax of 35 cents per ton on strip-mined coal and 15 cents per ton on deep-mined coal to help pay for reclamation of abandoned strip-mined lands. Although the bills include regulations aimed at preventing landslides, they would permit "mountaintop" mining, a practice that is prevalent in Appalachia. Congressmen defeated attempts to place a moratorium on strip mining on prime agricultural lands. The House bill would prohibit new stripping on alluvial valley floors in the West, whereas the Senate bill would allow new operations there if it is determined that they would not interrupt or prevent farming. The Senate also would

Continued on page 30

IMPORTANT NPCA PUBLICATIONS

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by Peter A. Twight

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conservation docket

exempt "small" operators—including most strippers in the East—from most standards for two years.

Clean Water: After an unsuccessful attempt in a conference committee by some members of the House to shove through amendments weakening the Federal Water Pollution Control Act, Congress is regrouping and preparing to take a long, hard look at the implementation of the FWPCA. The Senate has held a round of hearings in different parts of the country to gather information from local and state governments, citizens, and others involved in implementation. At press time it was expected that new legislation would be introduced and that the

Senate would mark up the bill this month. Several important issues are under consideration. For one thing, the FWPCA requires the Environmental Protection Agency Administrator to stimulate alternative sewage treatment technology. But other provisions of the law have been implemented in such a way that development of such technology has been thwarted. Attempts will be made to strengthen the law in this area. Many observers believe that the legislation should include provisions that promote wise management of sludge, prevent its toxic substances from entering the food chain, decrease the amount of sludge generated in the first place, and

stimulate better management practices for reducing or eliminating "point-source" discharges of pollutants. [Such practices include effective street repair and sweeping to control run-off pollutants.] Senators will examine ways to strengthen provisions that relate to control of toxic effluents, and to beef up enforcement. Countering attempts will be made to put off deadlines and weaken enforcement provisions of the law. Section 404 of the Act, which mandates wetland protection, will again come under attack. And finally, localities are requesting that construction grants be extended to allow completion of programs that are already underway.

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OLD STATE, RAILROAD, COUNTY MAPS. 70-110 years old. All states. Stamp for catalog. Northern Map Co. Dept. NP. Eagle River, WI 54521.

Continued from page 2

and subway services might be terminated at any time if some serious advocates of desperate solutions were to have their way; or if the disastrous condition of the finances of the city were to have that result by default, as may well happen. But surely a rebuilding program coupled with an inner-city open space plan would be better. Who shall rescue the cities?

THE SUPERCITIES are inherently uneconomic. Who could have devised a worse system for getting food to millions of people than bringing it into a huge metropolitan complex daily by truck over distances of hundreds of miles? Add the packaging and preservatives, and then wonder why food costs so much. Why not a vegetable garden outside the kitchen door? Or at least in an inner-city commons of the kind we have in mind. Who could have invented a more costly system for disposing of urban organic wastes than the vast network of sewers and treatment plants on which the big cities are dependent for their lives? And consider the folly of transporting water from the Adirondacks to Manhattan (disregarding the supply which would be available in a purified Hudson) while countrymen can draw it from the ground.

A GOOD LONG-RANGE urban policy will open up the cities, consolidate them, rescue them from the traffic and the fumes, make them fit places for work and residence, and take the pressures off the countryside and wilderness beyond. A good urban policy links up with good land-use policy. Comprehensive land-use programs will soon emerge again, and must be directed against urban sprawl and toward the protection of farmlands, woodlands, and rural communities.

AND WHY SHOULD a conservation organization get involved? We have responsibilities with Yosemite, Yellowstone, Big Cypress, Great Smoky: why take on more? In simplest terms because Congress added Gateway, and Golden Gate at San Francisco, and Cuyahoga (a project of great promise), and may tomorrow add Chattahoochee at Atlanta and Santa Monica at Los Angeles. And also because the intolerable conditions in the cities drive people to escape across the continent to the national parks and overcrowd them. And because the neglect of the cities leads to urban sprawl and the destruction of the countryside. And so these things are part

of our job at NPCA, for which we must find personnel and funds.

RETURNING to Washington, we learned that William J. Whalen had been appointed Director of the National Park Service, and Ira J. Hutchison, Deputy Director. We had urged the retention of the present officials, but in any event appointments from within the Service, and were gratified that on the latter point we were successful. The new men have excellent backgrounds and records in regional parks, the former at Bay Area Parks, the latter at Gateway.

We were immersed at once in the Clean Air Act Amendments, on which we had testified on invitation. We were asking our members for contributions with which to carry on this work; the appeal had to be brought up to date. We were focusing on clean air over the parks, but concerned about smog and poison gas in the cities as well.

The President's Message on the Environment arrived, an encouraging and impressive document which we shall analyze in a later issue. It promises a comprehensive effort toward the enlargement and protection of the National Park System. A program for the Redwoods had already been offered, and was noted again here; on this we had labored as invited consultants for weeks, urging the acquisition of managerial interests in land in addition to outright ownership.

THE WELTER of issues to be settled, statements to be readied and delivered, programs to be supported or opposed, and administrative and financial problems to be solved at NPCA every day, every week, every year, is enormous. And so it is that we must call upon our members so constantly for both money and the use of their influence in the right places.

One can escape the pressures, of course, by getting away from time to time to the countryside or wilderness. Once again you find the darkness at night under stars, the silence of nature within the sound of the birds and the wind, the unhurried pace of the turning of the earth, a sense of remoteness and spaciousness which were the heritage of mankind until the age of machines, factories, megalopolis. To the recovery of this wealth, and the inner tranquility that can come with it, we must dedicate a large part of the human effort, or at least of our share in it, for the sake both of the cities and of the open spaces around them.

—Anthony Wayne Smith

