suddenly it's me

Environmental Awareness:

There is one web of life and you are part of it.

The web is in trouble.

You can do something about it.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WESTERN REGION
Northwest District Office
1051 Federal Office Building
Seattle, Washington 98104

IN REPLY REFER TO:

June 2, 1969

Memorandum

To: Seasonal Employees

From: District Director, Northwest District

Subject: The Environment and You

As you know, the National Park Service has a world renowned reputation for its interpretive program and public service. A logical result of their efforts throughout the years has been an increased appreciation of the environment. We are now asking you to undertake a mission that will tune park visitors into park, home, and world environment even more than in the past.

The National Park Service Environmental Education program entails a fresh approach for working with the visitor and with schools. The principles involved are used in many areas, but they can always use sharper definition ...or we--and you--in the National Park Service are selling short our worth.

Sun, air, soil, and water are about all that make up our world--the four strands to the "Web of Life". But man is very much a part of this web, and sometimes we tend to neglect this fact. We are woven into it, yet each day finds us threatening our security in it. We, who have helped endanger and then helped save several species of wildlife, may well be an endangered species ourselves.

The four strands compose only the physical environment. Our environment also includes the living world, you and me, our technology, our cultural past and future. It is a tall order just to define this environment of ours, let alone be a responsible member of it. So we are trying this summer for a round trip outward from, and back to, ME.

A National Park Service area is more than a superb natural or historic treasure. It is an extension of our environmental home. True, it has special qualities and details that set it apart. But it has other qualities such as order and organization, Government and law, good times and bad, problems, checks and balances. It has its elements and systems, both natural and unnatural.

This part, and any other, has the added power to focus our attention, to open us up to let us think a little, and possibly to make us more aware of the world around us.

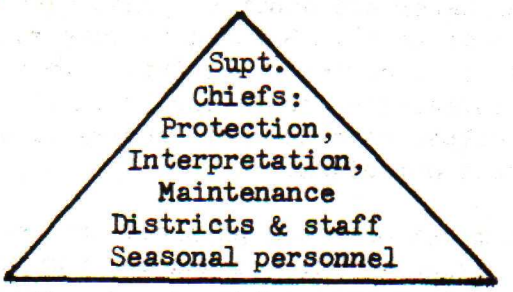
However, nature, history, and cultures-of-the-past, don't speak automatically for themselves. Nor does a casual visitor always get his personal message. This is where you and I come in. We want to take these park qualities and move people with them, bring that visitor to an awareness of his place in the natural order of things...and to some sense of responsibility for keeping it in order. What do we have to work with in making these points? We have the parks and monuments of the National Park System--and we have you.

The strands of the National Park Service web represent four basic functions--Protection, Interpretation, Maintenance, and Administration. Out of these interrelated functions we build Environmental Management.

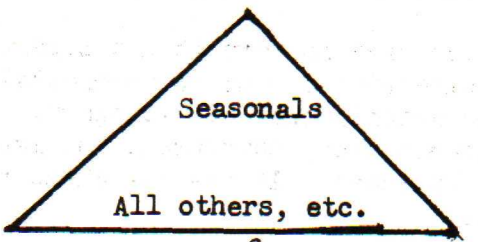
You will be involved in, or by, all of these functions to a greater or lesser degree. And whether you be a Seasonal Ranger (Naturalist), a maintenance man on trail work, or clerk (cashier) behind a desk, you will reflect the success of a portion of this management model.

The seasonal force forms the bulk of the direct-line public service unit, well over 50 percent of all Park Service uniformed people at peak season, in fact. These direct contacts with the visitor come about through activities such as scheduled walks and talks and demonstrations and the informal patrols and maintenance assignments which include literally millions of encounters.

Where will you actually fit in? Well, we think of a park organization as looking like this:



But to the park visitor, it looks more like this:



The Superintendent is responsible to the American people for his park--through Congress. You are responsible to the individual visitor, the public at large.

Don't ever underrate the significance of your efforts. We won't.

Knowing that we have something to say, how do we say it? We say it through this same visitor. We interrelate his functions and needs with the broad generalities of nature and society. Only we bring it down to earth by word and by example. As a form of life the visitor needs food and air and water and space. He consumes raw materials, he produces and he alters the world around him.

He has borrowed approximately 150 pounds of assorted chemicals (himself) from the earth, with which he will in turn process tons of other chemicals--gases, liquids, and solids. After 70 years or so he will return them to the earth.

He is evolving; slowly, and with continuity, he will change. He is related to and interrelated with every living thing around him. But unlike Dr. Doolittle he cannot "talk" to the animals, although he often suspects that nature is somehow an extension of himself.

Give him words; draw him pictures. Show him that his house differs little from that of a mud dauber wasp or a cliff swallow. Make him see his cities as much the same pattern from which coral reefs and ant hills are cut. Give him a sense of "belonging" in his own particular world, just as the life forms in your park "belong." Show him the reasons, the interdependency of creatures and himself in a regulated world. Each society is a model for another, no more than a variation on a theme. The balance of a pond is the balance of a household or a town. A dynamic balance will hold, while energy, raw materials, members and citizens constantly leave and are replaced.

Each such society is fragile; it can be injured. The pipes break, the steam dries up. The system stops until it is repaired. But we all draw from the same stream. We are interdependent.

If you are an interpreter your role will be to define these themes, to find the environmental models or systems where you are. Perhaps it is that coral reef we mentioned; perhaps it is a stream or a rotting log. Or perhaps it's some early site -- an Indian site/ dwelling, a colony, a town -- where the system broke down somehow, or evolved into some new form or style.

But caution--don't make this an exercise in futility. Rather, it is a design for hope. You may see implications of doom in the pollution of our rivers, but doom is not our message. Leave the visitor with the feeling he can do something about his world. And don't forget to use his curiosity.

If you are a maintenance man you will get through largely by example. You are the housekeeper and the landlord. A maintenance program reflects how well we practice what we preach, and our own respect for our park environment.

Let's face facts. We intrude. Our roads, our trails, our parking lots, and buildings have unavoidably altered a portion of this park. Intrusion, to be justified, must be managed well, and this must show. Again, the same is true of any town or city. The visitor is a housekeeper, too.

So, a clean restroom, a neat trail, say more than just that we don't like germs or litter. We build our roads to standards, bury our power lines where we can, are careful with the kinds of signs we use; and we don't patch brown pavement with black asphalt when we think about it.

If you are a ranger you will be practicing the broadest concepts of environmental management. Yet you will have no obvious models, such as a maintenance program or the spoken principles and ideas of the interpreter.

You protect all resources--park, property, and people. You reflect our concern and yours for this man-regulated experiment in cooperation with a nature-regulated world.

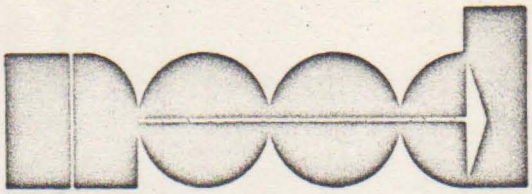
Conduct the visitor gently, so he doesn't destroy what he may not understand, whether he be in a campground, along the road, or relaxing on a trail. He must learn to accept the rules and play the game, or he harms what he doesn't even know he needs -- and thereby harms himself.

We all interpret, protect, and maintain our parks in our many different roles. Once we blamed someone else for ugliness and waste. We saw ourselves apart.

Now our park world and world outside are one.

Now, "suddenly it's me."

John A. Rutter



Man and his culture
are interrelated and interdependent
with his environment.

A NATIONAL PARK SERVICE PROGRAM

The National Parks contain an incredibly rich variety of plants, animals, and natural surroundings, ideal for teaching and interpreting the values and relationships of man and nature. This educational resource is being made available to the Nation's students as part of a National Park Service program: the National Environmental Education Development (NEED).

The goal of the NEED program is to foster an appreciative and critical environmental awareness in our youth, through an understanding of the interactions of natural and social processes illustrated in National Park areas. Its further aim is to increase the will and capacity to improve the environment.

The NEED systems and interpretive materials, combining the most effective educational techniques and keying the program into the existing curricula, were developed at the University of California, Davis campus, under the direction of Dr. Mario M. Menesini. All materials are pilot-tested and field-tested at select Park Service areas and participating schools throughout the nation. Unique to the NEED materials is their flexibility for adaption to any site, any ecology.

Basic to the NEED program is the premise that environmental awareness requires outdoor implementation of classroom lessons, which must be related to all subjects in the curriculum: to art, literature, social studies, as well as the natural sciences. Materials are being created for pre-site (classroom), on-site (environmental school), and post-site follow-up.

Phase I of the NEED program emphasizes the appreciative level in an encounter with natural phenomena at an environmental school site, with emphasis on academic, aesthetic, and skill interpretations. This phase focuses on elementary-school levels.

Phase II for the intermediate (7th, 8th, 9th grades) level of the program centers on man's positive and negative utilization of his natural resources, and his efforts to rectify a self-imposed contaminated environment through technological applications.

Phase III (high school) will develop the necessity for environmental ethics, centered on attitudes of the individual. It will integrate the disciplines of political science, economics, and sociology.

The NEED educational-research program is administered through the Educational Consulting Service, Orinda Village, California, under the continued direction of its founder, Dr. Mario M. Menesini.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

IN REPLY REFER TO:

OF MEN AND DRUMS

We are desperately in need today of help in relating ourselves to a world that seems increasingly shoddy--even downright dangerous to human life.

If man is a natural creature, why do we need this help? Possibly because we have lost track of our natural beginnings. Modern man is more a creature of his own civilization than of the natural biotic environment that, quite literally, grew him.

We shaped a civilization and then, in turn, the culture of our own creation began to shape us. Most of our environmental woes today spring from "loss of touch" with the natural balances that still govern us, whether we realize it or not.

Even man, with all his technology, cannot unbalance Nature. If we put too heavy an entry into the pollution column, Nature simply subtracts from the columns labeled "beauty" and "comfort" and eventually even "safety." The adjusted balance results in an unpleasant squeeze for most life forms that we humans consider desirable.

Our lives are inextricably interwoven into the thin blanket of life that covers our tiny planet. Let one thread rot or ravel, and the whole fabric is in danger of falling into disrepair or complete disintegration.

Should such a tragedy occur, Nature would eventually reach new balances. They might be of such a nature that man would no longer be a factor.

The National Park Service has established a network of Environmental Study Areas (ESAs) where the superb natural and cultural values of the National Park System are interpreted through on-going environmental education programs in nearby schools and for interested individuals or groups.

ESAs are for exploring, for discovering, for awareness and for growth. In them, people can examine the natural pulses and rhythms of the Earth and its delicate, quivering balances.

They can examine too the "different drummer" to which their own civilization marches.

Man is cunning, acquisitive, comfort-seeking, and infinitely inventive. If he can be jarred out of his preoccupation with his own uniquely human desires and his terrifying abilities to fulfill them, he may yet create a harmonious counterpoint of human and natural drums.

An Environmental Awareness Message
from the National Park Service

96025

STATEMENT PREPARED FOR FEDERAL EXECUTIVE INSTITUTE, CHARLOTTESVILLE, VIRGINIA - GEORGE B. HARTZOG, JR., DIRECTOR, NATIONAL PARK SERVICE

In a world where a technological giant has grabbed the bit in its own teeth, man searches for his lost self and a better world to house it. The current vogue for "environment" is not just a passing human whimsy to spruce up the world; it is the newest chapter in man's continuing search for himself.

Never before have so many of us been so concerned with halting the degradation of land and air and water--with improving the natural quality of living room on this planet--with the agonizing choices and judgments and self-limitations that add up to the shaping of an environmental ethic.

The hopeful aspect of this nationwide quest is the variety of sources and directions from which it is developing. A percolating sense of urgency suggests that an environmental ethic is an idea whose time has come.

Modern man, digging up dinosaur bones and poking his nose cone into outer space, is suddenly and disturbingly aware of the implications of these seemingly unrelated activities. Seen together, they bespeak an enormous timetrack, with a past where no man existed and a future whose shape and character can be guessed at but dimly. Instinctively, in his search for a better world, man is groping his way back toward the center of the web of life.

For a variety of reasons, the search for a better world must begin with man himself. It is he, primarily, who has made the mess, and it is he who will have to live with whatever else he makes of it. Essentially, then, what we pursue is a man-centered environmental ethic. Whether we call it that, or a national policy for the environment, or something yet unthought of, makes little difference. From the conference rooms of the national legislature to the backyards of concerned suburbanites, the search boils down to making the earth an attractive, meaningful, habitable home for man.

In its June 17, 1968, report, the House Subcommittee on Science, Research, and Development noted that "a comprehensive policy toward the environment cannot help but be philosophical rather than specific." The report strongly implied that man must articulate an environmental ethic by stating, "The human race is, in fact, managing the environment today. There is no retreat to a passive, non-interfering Eden-like relationship with nature."

Less than a month later, on July 11, a Special Report to the Senate Committee on Interior and Insular Affairs tackled the environmental ethic directly:

> "If it is ethical for man to value his chances for survival, to hope for a decent life for his descendants, to respect the value that other men place upon their lives, and to want to obtain the best that life has to offer without prejudicing

equal opportunities for others, then the cornerstone of environmental policy is ethical. That cornerstone is the maintenance of an environment in which human life is not only possible but may be lived to the fullest possible measures of personal freedom, health, and esthetic satisfaction that can be found. No government is able to guarantee that these values can be realized, but government is able to assist greatly in the maintenance of an environment where such values are at least realizable."

Meanwhile, we continue to inflict grave new injuries upon our environment. The remedies for these injuries to our environment are many and complex but it seems clear that we must meet at least two minimal needs--the need for environmental education of a scope never before undertaken, and the need for a man-centered environmental ethic. Humanity must have both as guides through the technological jungle it has created.

Let us consider first some of the more current consequences of our technology. One of the most vexing hazards confronting us now is the sonic boom. It most certainly is destined to worsen. A blue ribbon group of prominent scientists, in their report last year to the Secretary of the Interior, "Noise and the Sonic Boom in Relation to Man," declared that between 20 and 40 million Americans, in a path 12½ miles under either side of the flight tracks, will be subjected to from five to 50 sonic booms per day when the expected number of supersonic transport planes is in operation "sometime after 1975."

Each of us, no doubt, has his own description of the effect of a sonic boom. Someone more poetically inclined described it at a recent air pollution conference as "tantamount to living inside a drum beaten by an idiot at insane intervals."

The committee of scientists predicted that many people would resort to protests, to political pressures, to legal procedures and to other active and costly measures to attain relief. Payment of claims for property damage could be expected to reach $80 million a year, the committee estimated.

But where in America shall we present the bill for the tragic disintegration in Canyon de Chelly National Monument of an 800 year old cliff house--an irreplaceable national treasure, demolished in one split second by a sonic boom.

Our national parks are comparable to the canary in the miner's cap; a stilled voice signalling the presence of death in the mine shaft air. Parks are our early warning system. The pressures on them are the same pressures that threaten our overall environment. The only difference is that because of our commitment to maintain quality in the parks the pressures there make themselves felt earlier. We are forced to choose or lose at a higher point on the environmental scale.

The difference is of small matter. The choices we make in the parks today are the same choices we will make in the cities tomorrow or the day after. They concern noise and pollution and people pressures, and where and when will we choose. How much are we willing to lose? How far down the quality scale will we slide before we decide?

The fragile Everglades National Park is a case in point, and urbanites would do well to take note. This incomparable park in southern Florida has fought off the ravages of a succession of spring droughts and the drainage works of a flood control project that controls one of the park's major flows of water. National public concern rallied in an effort that may yet assure the park its needed annual minimum flow, irrespective of new agricultural and industrial demands.

But now, introduce a regional jet airport into the park's other major drainageway, the Bog Cypress Swamp, and cut both the Swamp and the region north of the Everglades National Park with a proposed 1000-foot wide access corridor to include an interstate highway, pipelines, rapid transit--all the accoutrements of megalopolis. Most of these are federally supported. The park's water problems will soon be compounded with waste, noise, and air pollution. Now let's add the environmental alterations introduced by people pressures--the urban and industrial subdivisions that are certain to follow.

In 1916, Congress established the National Park Service, declaring that it must manage the parks for public use by such means and in such manner as to pass them on unimpaired for future generations, but the environmental havoc goes on. There is no regional plan to accommodate the wrenching alterations or the social, cultural, and aesthetic impact of the proposed airport and the residents in new communities proposed to be drawn there by airport and highway.

In addition to intensifying the water problems, where are the considerations for the effects of shattering noise, noxious fumes, and other pollutants on the park and its visitors? And what will these same environmental smudges mean to the new communities?

We cannot predict precisely what will happen to the fragile ecosystems of the park and to the park experiences of the millions of visitors, but we know that neither will be the same. Where is the input available from the experience of recreational and city planners, the demographers, the biologists, the environmental scientists?

Jetport authorities have yet to demonstrate anything that will offset or minimize our concern for the adverse environmental effects on the park of hodge-podge development. Lip service certainly has been paid to the problem, but the record has been mostly meetings for the sake of meetings and talk for the sake of the record.

What is urban America's stake in all this? As the Everglades National Park expires, our cities listen anxiously. The silence of the canary grows deafening.

And it is not only the land and the living creatures other than man that are suffering from our single-eyed technological pursuit of physical comfort and material progress. Each of us today is in danger, perhaps even in deadly peril, from environmental enemies of our own creation--enemies with which we are physically unequipped to do battle. With our lightning achievement of the ability to alter our environment, evolution has been utterly unable to keep pace. Hence, we humans have no adaptors of the kind that would warn us when the artifacts of comfort and expediency are accompanied by so-called "side effects" that are lethal.

The most frequently heard protest against in-city jetports is aimed at noise. Why? Because we have eyes and ears. Yet Rene DuBos has suggested that pollutants from internal combustion exhausts are affecting our bodies in ways that may not be understood for another 20 years. By the time this knowledge is available, it may well be too late to be of use. The adverse effects on the human race could by that time be irreversible.

Radioactivity is another verse of the same dirge. The hard radiation that destroys our blood platelets or the cell productivity in the marrow of our bones give no warning twinges. We do not have built-in geiger counters and so must rely upon machines which can detect these dangers and translate them into warnings on labels or instructions in operators' manuals. But such warnings are no substitute for the scorched thumb or lacerated toe.

Somehow lacking the organic early warning systems that would be equivalent to eyes and ears and nerve endings, man must substitute environmental awareness that will alert him to unfelt dangers. He must learn respect for the forces he is loosing and which rage unseen, unheard, around him.

To establish our physical and moral well-being in relation to these threats, we find ourselves laboring under two urgent needs: one, for environmental education; the other, for an environmental ethic. To reach at <u>once</u> for the <u>second</u> goal is to insure, almost automatically, our gaining the <u>first</u>.

The job of repairing and restoring our environment is one that must, if it is to be even moderately successful, engage us all. Like charity, an environmental ethic must begin at home.

How do we start? I think we have begun already. Each one of us, as individuals, as members of private and public organizations, has spent more time recently than ever before reading about, considering, trying to cope with environmental problems. The next step, it seems to me, is conscious exploration and research as to how best we can participate in our own special areas and then bring together into an effective national effort this search for ethical answers to our environmental problems.

No organization, at any level, is capable of assuming sole responsibility; all organizations--and all individuals--must be involved.

It is hardly necessary to point out that no longer can we expect the "conservationists" to handle the conservation job. We will need the physical scientists and technologists; we will need also the social scientists and philosophers and artists and generalists. - In short, we can use every ounce of talent and insight and expertise we can muster to turn the tide of environmental degradation.

We have heard that our very survival as a species is at stake. But something more than mere survival is in the balance. Even in the behavioral sinks of overcrowded rat habitats, some survive.

What we are everywhere seeking is survival of the human spirit as well, a sense of being "at home" and "at peace" with our world. Eric Sevareid, at a recent White House luncheon with a conservation theme, counseled that we must look to the land if we would save our souls.

Perhaps we need soul conservation more than soil conservation--an environmental frame of reference in which to live our lives.

Recognizing the need of the National Park Service to relate its programs to the urgent needs of society, we have looked with a new concern to the national parklands which are the superlative examples of the Nation's natural, historic and cultural resources.

As keepers of the standards, we have an awesome responsibility. How best can we use these living standards of excellence in the national search for an environmental ethic?

It is increasingly evident that the whole history of the National Park idea has been the evolution of an environmental ethic. Our interpretive programs, as old as the Service itself, have attempted to communicate to every visitor the excellence each park area embodies, whether its significance be scenic, historic, scientific, or cultural. If we have failed, we decided, it was in not bringing the visitor into the center of his park experience. The parks, like life, are meant to be lived. The answer, we believe, is man himself.

From our inquiry have developed a number of programs which we hope will constitute a first, if modest, step.

The National Environmental Education Development (NEED) program concentrates, in the elementary grades, on teaching appreciation of the natural world, by taking children into the national parks, or other reserves. This natural world, the child learns, is anything he finds around himself.

The intermediate stage of NEED teaches the child about man's uses and abuses of his natural resources. Finally, in senior high school, the materials encourage development of a very personal sense of an environmental ethic.

Another program is the development of Environmental Study Areas on Park System lands possessing potential for this activity. An ESA is an area whose natural, historic, cultural or man-and-nature characteristics are effectively combined with an organized study program to provide an understanding of the total environment and the individual's relationship to it.

The Service is establishing ESAs within the Park System wherever the opportunities and the demands coincide, and is acting as advisor to community groups or school systems which ask for help in setting up their own outdoor environmental laboratories. The emphasis of such study areas is on the total environment, taking into full and careful consideration the historic and cultural milieu as a factor in the inter-relationships between man and his environment.

In order to give environmental education the strong national thrust of the National Park System's total resource package, many hundreds of such study areas are needed, outside the parks as well as in. To stimulate their creation, use and protection by local and state governments, by private citizens and organizations, and by schools--both public and private--the National Park Service has initiated a program to identify and designate such significant study areas as National Environmental Education Landmarks (NEEL).

"Know thyself" was the advice of the gods as written in the temple at Delphi. It is in answer to this need to know oneself that the National Park Service environmental education materials are designed. Starting with man, often troubled and insecure, the program provides strong environmental strands--the "big ideas" that have served as the natural pattern of the ages and have been copied by man in his own uncertain attempts to build a cultural world. On these conceptual strands it leads him carefully and thoughtfully out into the sticky web of his world, like a resident spider surveying his habitat. He learns his world from the center outwards, and in learning, he develops a sense of belonging and involvement. He begins to see his world in terms of the way nature has operated since the beginning of time, and he appreciates the often imperfect but nevertheless similar repetitions of these concepts in the human worlds of history and culture.

I do not present this approach with the implication that we have found the answer. Indeed, the search for a national conscience in the field of conservation has enlisted the energies of men and organizations over many decades.

But, because we feel we are on the right track, we are reaching out to solicit the assistance of those people who might help articulate a truly national ethic, one which places each individual at the center of his personal web of life, helping him to see himself in relation to his world and every other living thing, and in the light of prehistory, history and culture, so that his interactions will be the most satisfying, gratifying, and spiritually edifying it is possible for him to achieve.

This is no small order, but the times are tall and turbulent. They call for an ethic to match them. We have men and women in the fragmented patterns of our modern world--people who could help define a workable ethic, to place our world in perspective, to accommodate man along with our technologic achievements, to bring our environment into human focus.

The gut-lonely human search for a way to make life more bearable--eventually even truly livable--could hardly be more important a subject for the attention of us all.

I turn finally to Freeman Tilden, as I must so often, when I grope for words to express what the national parks mean, and what more they can mean. "Make them a part of your life and thought," he said. "From it will come mental health for the millions."

Tilden spoke not merely of the surface, scenic beauty of the natural park areas, or even of the serenity of our proud historic and cultural areas. "I am convinced," he said, "that there is an Abstract Beauty in the Universe--the Cosmos--that we attempt to describe by our verbal abstractions like Order, Harmony, Justice, Truth, Love . . ."

"If there can be merit in the concept, the implication is that behind the beauty that we sense, there is also the beauty of Nature's order, of the adventure of the human mind; the beauty of the artifact--man's attempt to create beautiful things; and the beauty of human conduct--of behavior of which man in his best moments has shown himself capable."

Excerpts from 1967 lectures delivered by Sigurd F. Olson at the Massachusetts Institute of Technology, the University of Illinois, and the Wilderness Conference of the Sierra Club. Mr. Olson is President of the Wilderness Society and for many years was consultant to the Secretary of the Interior and to the Director of the National Park Service.

THE ECOLOGIC CRISIS IN ENVIRONMENT

by

Sigurd F. Olson

To explain why anyone is a conservationist and what motivates him to the point where absorption in the preservation of his environment becomes a way of life, means going back to the very beginning of his involvement with the natural scene. I believe one of the basic tenets in the life of anyone really concerned is the development of love for the land, and that this comes only through long and intimate association with natural beauty and living things, an association that not only breeds genuine affection, but has inherent in it a sense of awe, wonder, and reverence for the infinite and varied ecology of the country.

Love is nourished by constant appreciation of what is aesthetically rewarding and spiritually enriching, and inevitably matures into a recognition of what is significant from the standpoint of evolutional development. Only if there is understanding can there be reverence, and only where there is deep emotional feeling is anyone willing to do battle for the land. A Spaniard said long ago, "There is only one cause a man must fight for and that is his home." Conservationists fight not only for their individual homes, but for the home of the whole human race, the total surroundings of man, the soil, air, water, and all life with which he shares the earth.

After 400 years on this continent, we are faced with a crisis which threatens our survival and happiness. Our waters have become sewers, our air poisoned with noxious wastes, our soil impregnated with harmful chemicals, the surface of the terrain befouled with garbage and the enormous effluent of civilization. Our garish cities are full of ugliness and noise. The demands of our affluent society are depleting our resources to the point where we see their end. With huge earth-moving machines we change at will the features of the land, dam and reroute rivers, lower water tables, level hills and build highways across impassable territory. Life moves at an ever faster tempo and the long, slow rhythms of the past are forgotten in the frenzy of our pace. There is nothing we cannot do, and our inventive genius seems able to cope with all problems, but we ignore basic human needs for beauty, space, and naturalness, believing the age of gadgetry and artificial diversions can still our unrest.

Man has emerged in the last two generations as a geological force capable of destroying the earth, and though he is aghast, he continues his desecration, confident that somehow he will escape the inevitable penalty. The fact he has created a crisis seems to bother him not at all. He reads the predictions of the year 2000 and laughs. To most, conservationists are fanatical in their zeal, prophets in the wilderness who cry as Isaiah once did, "Woe unto them who build house to house and lay field to field lest there be no place where man can stand alone."

Still there have been many who look at conservation as a movement having more to do with people and their culture than with any particular phase of environmental disruption. Beginning with Henry Clay who said, "The greatest patriot is the man who stops the most gullies," to Paul Sears of Yale who stated, "Conservation is a point of view involved with the concept of freedom, human dignity, and the American spirit," the stress has been the ultimate question of what kind of a world we want.

Also Leopold said that conservation is the development of an ecological conscience and that the practice of land management must spring from the conviction that what is right must preserve the integrity, stability, and beauty of the community of which man is a part.

If conservation is a point of view and the development of an ecological conscience, then what is involved is man's way of looking at the earth, his whole relationship, what he does to it and how he feels about what he has done. An ecological conscience implies a sense of guilt when he does something that destroys or befouls his living place, a feeling that because he has sinned against man and his right of enjoyment of the earth, it is ethically and morally wrong. Conservation then, is more than a point of view, it becomes part of our mores and way of life.

Most Americans have a blind spot when it comes to knowing what conservation means. They think it has only to do with parks and forests, with hunting and fishing, roadside beautification, planting trees or game birds, saving places for picnics and camping, and while these are part of it, actually it is involved with man's overall attitude toward the earth in an age where the ideal seems to be material progress and unlimited exploitation. They ignore the fact that the preservation of environment is the greatest challenge of our time, and that if we fail to meet it in our obsession with luxury and materialism, we will lose our cherished freedoms and the richness and beauty our homeland once had. Without a proper point of view and a realization of the crisis we face, the years ahead are bleak indeed.

Walter Orr Roberts, in speaking to the American Association for the Advancement of Science said:

"To me the true significance of the space age, this accelerating age of science and technology in which we now live, is that it is beginning to

lead us to wonder once again about the nature and the purpose of man, about what constitutes the good life and the good society. It is bringing philosophy once more to the center of the scene, making it as important as it ever was in the Golden Age of Greece."

Philosophers, historians, sociologists, and scientists are pondering the ecologic crisis with which we are faced, realizing that man no longer lives with nature as other creatures do, and he once did, but that he has become an exploitive power that now threatens his continuance as a species. In probing the reasons for western man's point of view toward the land, Lynn White, Jr., says:

"The victory of Christianity over paganism was the greatest psychic revolution in the history of our culture because then our daily habits of action became dominated by an implicit faith in perpetual progress through unlimited exploitation of the earth and its resources, an ideal unknown either to Greco-Roman antiquity or to the Orient.

"Man," he says, in speaking of the mandates in the Book of Genesis, "named all the animals, thus establishing his dominance over them. God planned all of this explicitly for man's benefit and rule; no item in physical creation had any purpose but to serve man's purposes. It was God's will that man exploit nature for his proper ends.

"In antiquity every tree, every spring, every stream, every hill had its guardian spirit. Before one cut a tree, mined a mountain, or dammed a brook, it was important to placate the spirit in charge and to keep it placated. By destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects. Man's effective monopoly on spirit in this world was confirmed and the old inhibitions crumpled.

"The whole concept of the sacred grove is alien to Christianity and to the ethos of the west. For nearly two millenia Christian missionaries have been chopping down sacred groves which are idolatrous because they assume spirit in nature.

"What we do about ecology," he concludes, "depends on our idea of the man-nature relationship. *** We are not going to get out of our present ecologic crisis until we find a new religion or rethink our old one."

Such statements by those who are deeply concerned indicate a growing understanding of what is responsible for our attitude toward the environment. Increasingly, not only historians and philosophers, but scientists and leaders of industry are agreeing that science does not have all the answers, but that the final decisions lie in the realm of the humanities.

Dr. Julius A. Stratton, former President of M.I.T., said to a recent graduating class: "We are dedicated to science but if we expect technology to solve the ills of civilization, we are doomed to disillusionment. The solution lies in the field of the imponderables, the great unexplained truths and emotions that mean the good life and the happiness of a people."

And so it seems we have come full circle, and now after centuries of mistreating the earth, we are faced with an ultimatum we can no longer ignore or evade. Unless we stop the spreading blight over our country, purify our air, water, and soil, save the last remnants of natural beauty and wilderness, our future is uncertain. There is a slowly emerging realization that the application of technology is not the answer unless man's spiritual welfare is the major concern and that an ever burgeoning economy should achieve a balance with values that are more important to our welfare.

But even with such encouraging trends in thinking, the vast majority still hedge and evade the many problems, feeling as Americans always have that they can move if they wish, and somehow escape the penalty of abuse. The struggles still go on with the same old cliches and worn out headlines, industrial payrolls and dividends versus scenery, pure air and water -- food production versus wildlife -- highways and airports versus beauty and quiet.

Stewart Udall, former Secretary of Interior, wrote:

"Gross National Product is our Holy Grail: the economists and statisticians its keepers. Statistics concerning auto output, steel production, heavy construction, housing starts, freight car loadings, have become the indices of the American advance.

"We have no environmental index, no census statistics to measure whether the country is more or less livable from year to year.

"A tranquility index, a cleanliness index, a privacy index might have told us something about the condition of man, but a fast growing country bent on piling up material things has been indifferent to the little things that add joy to every day life.

"We have perfected the concept of the land's carrying capacity for animals, the principles of sustained yield in the management of trees and plants. Yet we abandon the idea of natural balance when we come to our own species. *** The time has come to evolve an ecology of man in harmony with the constantly unfolding ecologies of other living things. We need a science which will enhance the condition of man."

We know what we have done to our surroundings and are concerned, but we still refuse to listen, believing that through some legerdemain and our infinite capacity to build, manipulate, and improvise, we will be extricated from the morass we have created. At the same time there is a nebulous stirring in people's minds, a broad uneasiness that persists and hounds us even as we continue our pollution, tearing up the earth, and surging forward toward the millenium when our gross national product will be a thousand billion dollars. Man is becoming aware of his dilemma, but has no answer for it.

A hundred years ago, Henry David Thoreau said, "In wildness is the preservation of the world," and in this one prophetic statement gave the answer, for he saw portents of the future, and what he saw disturbed him.

The space age of today is a far cry from the elemental world he knew for we have opened up a veritable Pandora's Box of treasures and powers which have changed the pattern of human life. Scientific advance has brought nuclear energy, space exploration, satellites in orbit. Computers solve problems so complex, their meanings are beyond us. Medical science is controlling disease. We are exploring the secrets of life and chlorophyll, will soon be synthesizing food. We are probing ocean depths and the interior of the earth, moving so fast we are stunned and bemused.

From the standpoint of sociological development, the pace is equally swift; the springing into being almost overnight of new governments marking the end of colonialism. We have the United Nations, Common Market, World Health, Alliances for Progress, a multiplicity of international complexities unheard of a generation or two ago with the growth of a communications and transport system which is wiping out isolation. There is communism and neutralism, new ideologies and religious nostrums to take the place of ancient beliefs.

As if this were not enough to compound and confuse, there is the population explosion at an astronomical rate. The United States is no exception, and by the year 2000 it is estimated we may well have 350 to 400 million, double our present population, and the world at large, six billion people. While painfully aware of the implications, there is no end to the pyramiding of numbers and the resultant shrinkage of living space for human use. Soon there will be no more ground for expansion and humanity grows as fearful and distraught as other creatures when there is no longer any room.

A strange and violent world is ours, the great silences replaced by the roar of jet engines, our cities vibrating with noise and foul with gases and pollution. The smells of woods and fields and forests are replaced by those of combustion and industry, our senses bombarded with impressions man has never known before. Were it not for a racial consciousness steeped in a background that knew nothing of technology, we might make the adjustment more easily, but unfortunately, physiological and psychological adaptations take

aeons of time. Still too close to our beginnings to ignore them, and in spite of comforts and luxuries never known before, we are conscious of tensions and a sense of instability.

To think that only a hundred thousand years have elapsed since our emergence from the primitive, with vague beginnings running back a million years or more, it is not surprising we feel as we do. When we remember during all this time man's life was regulated by the seasons, the fears and challenges of the wilderness and total dependance on natural things, that only during the last ten thousand years did he leave evidence of any culture beyond the stone age, we realize how close we are to the past and how powerful our ancient ties to the earth.

In the past few decades, though we have almost succeeded in weaning ourselves physically from nature, we still have not severed our spiritual roots, and there I believe is the cause of our discontent. With growing urbanization, the change is coming more and more swiftly and we are now embarking on the greatest adventure and tragedy of all, exploring the universe while holding in our hands forces which threaten our survival.

Catapulted into such a dynamic and unfamiliar world, we are questioning our objectives and the meaning of our lives. We may seem urbane and sophisticated, but we are beset by longings we cannot satisfy, and search for quick panaceas to fill the growing void within us. In the light of the conditioning that has made us what we are is an almost universal urge to somehow align ourselves with those influences dominant for ages. We are still largely unaware that the solution may lie in a return to our ancient attitudes toward the earth.

Julian Huxley, in commenting on the needs of modern man, said:

"One function of the earth whose importance we have just begun to recognize is that of wilderness, the function of allowing men and women to get away from the complications of industrial civilization and make contact with scenery and unspoiled nature."

Here, perhaps, is a clue to our dilemma. The world has changed too swiftly for modern man, who, in spite of everything, still moves to ancient rhythms. When he steps out at night and looks at the moon, even though dimmed by smog and the lights of a city, he is doing what man has done since the dawn of the race. Man of the atomic age still listens to the song of the wilderness.

Last year a hundred million of us traveled to the national parks, and uncounted more millions took to the road over weekends and holidays until it must have seemed as though the whole population were on wheels. Going to the mountains, lakes, or seashores is evidence of the need to escape the

crowding megalopolis for the open countryside. It is an American phenomenon, this moving out, and it is based on a need only the out of doors and naturalness can satisfy.

Stanley Diamond, in commenting on modern man's need for escape from the cities, says:

"The longing for a primitive mode of existence is no mere fantasy or sentimental whim; it is consonant with fundamental human needs. *** The search for the utopia of the past projected into the future is paradise lost and paradise regained."

We know there is a crisis in the ecology of the land, know from personal experience that people must get away from cities in order to keep their sanity and perspective, that unless cities become more habitable, each will destroy itself and be abandoned. We know that environment means the total habitat of man, and that the solution to our problems lies in a new attitude toward the earth, a sense of stewardship rather than exploitation. We are beginning to see that ours is not only an ecologic crisis, but a moral one.

"Why," asks Harold Means, "is man's relation to nature a moral crisis? It is a moral crisis because it is a historical one involving man's history and culture, expressed at its roots by our religious and ethical views of nature.

"Perhaps," he suggests, "the persistence of this as a moral problem is illustrated in the protest of the contemporary generation of beats and hippies. Perhaps those who have turned to Zen Buddhism represent an overdue perception of the fact that we need to appreciate more fully the religious and moral dimensions of the relation between nature and the human spirit.

"It seems to me much more fruitful to think of nature as a system of human organization - as a variable, a changing condition which interacts with man and culture. If nature is so perceived, then a love, a sense of awe, and a feeling of empathy with nature need not degenerate into a subjective emotional bid for romantic individualism. In this sense, justification of technological arrogance toward nature on the basis of dividends or profits is not just bad economics - it is basically an immoral act. Our contemporary moral crisis then goes much deeper than questions of political power and law, of urban riots and slums. It may at least in part reflect American society's almost utter disregard for the value of nature."

Over the centuries a host of perceptive minds have believed that if man could only recognize his relationship to the earth and to the universe itself, he could become part of the order and reason that governs his existence, the movement of galaxies as well as the minutest divisions of matter.

Lewis Mumford reaffirmed this thought when he said:

"Man's biological survival is actually involved in cosmic processes and he prospers best when some sense of cosmic purpose attends his daily activities."

Life, as it is lived today, is a fragmentary sort of thing, and man often feels as impermanent and transitory as the things he has built. If he can grasp even an intimation of cosmic consciousness, he will know what the sages have been trying to tell mankind for ages. If we can believe the wise, then there is still hope for beauty in our native land, and if it is a spiritual resource, then there should be no question of its preservation.

But the fact remains there is an ecologic crisis, and that by the end of the century if it continues and we do nothing to reverse its impact, we may well destroy ourselves or have a world that is without happiness or richness. Even though we are beginning to understand that what is happening is the real reason for our unrest and dissatisfaction, there still looms the monumental task of doing something about it.

We must build so broad a base of understanding regarding conservation that the protection of our surroundings will be accepted by all. Only when people know that it is closely involved with our culture and spiritual welfare and its real dividends humanitarian, will they embrace its tenets and do what is necessary to restore what has been despoiled, and protect what is left. The most vital task for modern man is to bridge the enormous gap between the old way of life and its basic values and the new concepts of the age of technology.

Technology and the population increase is a two-pronged threat we must deal with before it is too late. None of us is naive enough to want to abandon what technology has wrought. We must make the adjustment between the old and the new, span the past and the present, and look at our habitat through the eyes of enlightened man. If we can begin to live in this modern world with the ancient dreams which have always stirred us, there is hope.

To change the thinking of a people is difficult. To take from them their Holy Grail of an expanding gross national product, and their blind devotion and faith in science and technology as a cure-all for their ills, will take wisdom and dedication. A people do not easily give up their acceptance of a way of life that is more comfortable and exciting than ever before in history. To make this change may be as difficult as asking man to tear from his psychosis his inheritance from the primitive.

Americans have a history of never moving unless confronted with disaster or a major crisis. We are now faced with one of greater proportions than we have ever known, and for the first time are concerned with what is taking place. There are hopeful signs in the general alarm over air and water pollution and the willingness to face the expenditure of billions of dollars to bring back beauty, cleanness and order to our country. But these are only indications; the population at large has other things to think about.

There are those who believe we can have our high technology, continue at the same pace of ruthless resource exploitation, and still preserve our world as habitable and pleasant for man. I doubt very much that this will be possible. The only alternative is to reverse our dominant attitude toward the earth, and in our use of it recognize that man is part of nature and all life, and that his happiness depends as it always has and always will on living in harmony with nature. If we can restore love and understanding of our environment, then we can look forward to the future with hope and confidence. If we can look out at our land with reverence, our great knowledge could mean an age of happiness and peace. This is the greatest task of man today, for unless we meet our ecologic crisis and solve its problems as thinking men, there will be nothing to plan for, no utopia, no paradise regained.

"Until he has been part of
a cause larger than himself,
no man is truly whole."
Richard M. Nixon

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