

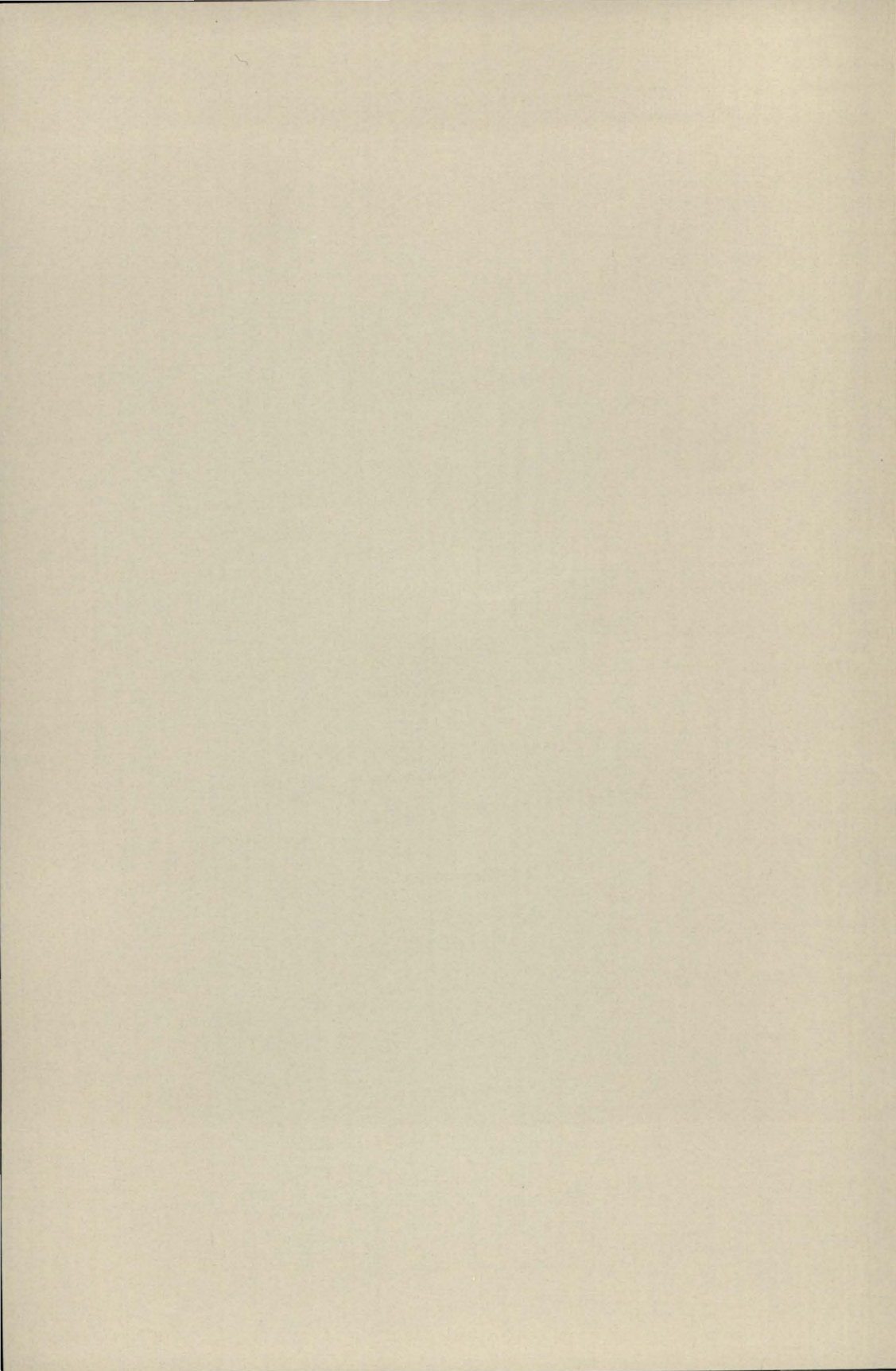
*PRESIDENT
OF THE NATIONAL
WILDLIFE FEDERATION*

JAY D. HAIR



*WILDERNESS RESOURCE
DISTINGUISHED LECTURESHIP*

University of Idaho Wilderness Research Center





Wilderness Resource
Distinguished Lectureship

8

*WILDERNESS:
PROMISES, POETRY,
AND PRAGMATISM*

*Jay D. Hair
President,
National Wildlife Federation*

UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER

April 8, 1987

Published as Contribution No. 315 of the Idaho Forest, Wildlife and
Range Experiment Station.

Illustrations by Lorraine Ashland

Introduction

Edwin E. Krumpe

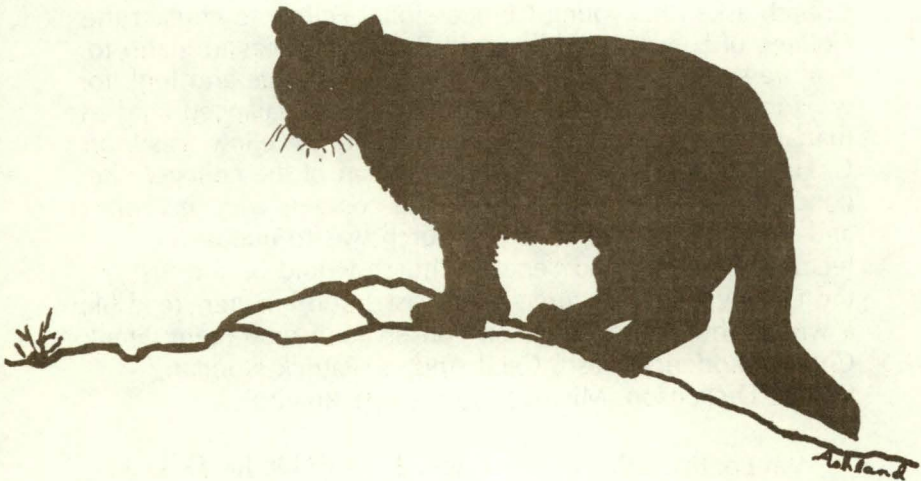
It gives me great pleasure to welcome you to the eighth in the annual series of Wilderness Resource Distinguished Lectureships sponsored by the University of Idaho Wilderness Research Center. The Center's mission is to promote research and educational activities to further our understanding of wilderness and natural ecosystems and man's relationships to them. Our goal is to gain knowledge that can be applied to better manage our designated wilderness areas so that the public can enjoy sustained use and benefits from our wilderness resources.

It seems appropriate to give you some background to this lectureship. It was conceived in 1971 when Senator Frank Church asked his young Congressional Fellow to contact the College of Forestry, Wildlife and Range Sciences in Idaho to explore some means to create a better dialogue and look for ways that wilderness can be brought into a balanced land use management framework. The Congressional Fellow was John C. Hendee, who now serves as the dean of the college. The concept that was developed through contacts with the college and interactions with Senator Church was to initiate a lectureship series, and Senator Church would be the first of the Distinguished Lecturers. The past seven lecturers read like a who's who in the American conservation movement: Frank Church, Roderick Nash, Cecil Andrus, Patrick Noonan, Russell Dickenson, Michael Frome, and Brock Evans.

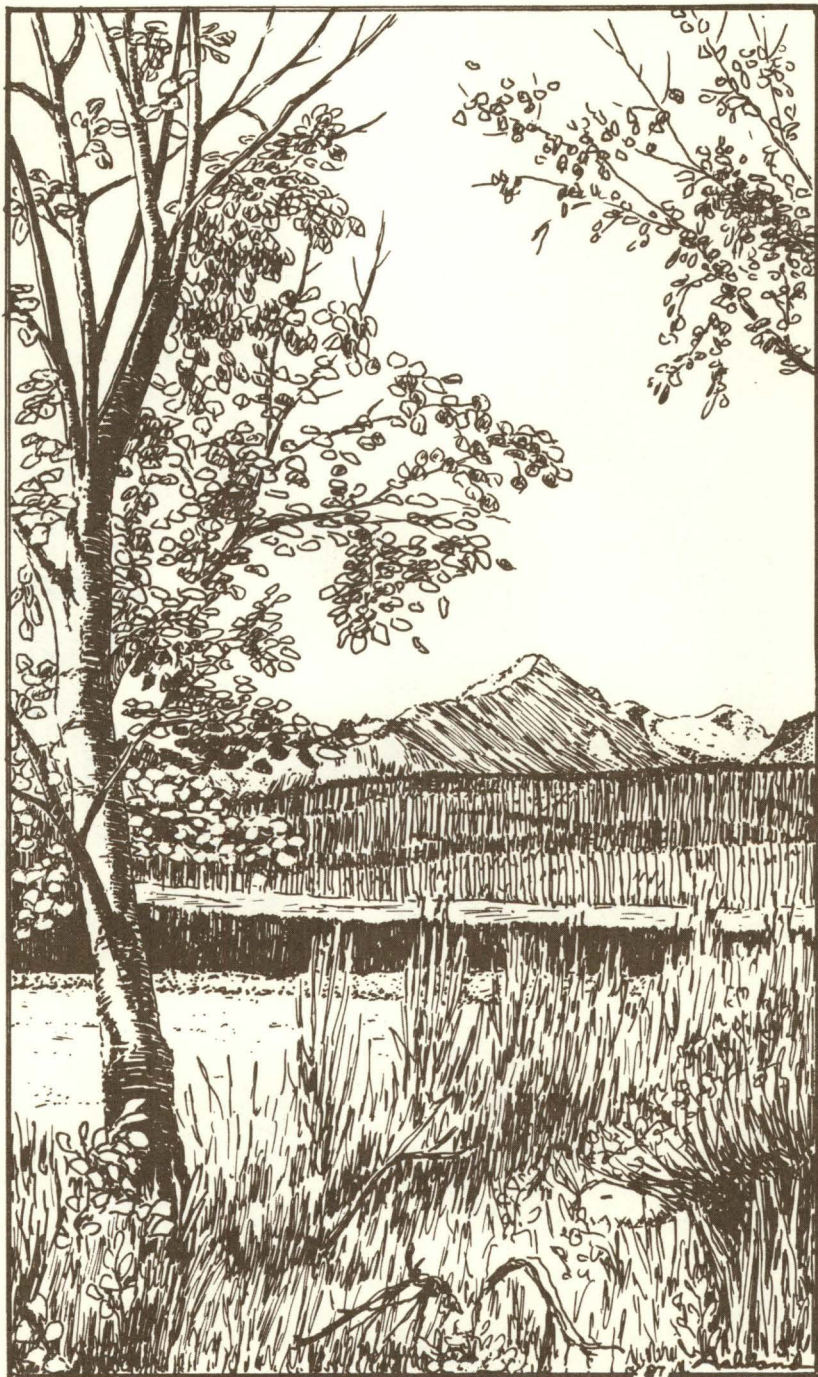
We continue this tradition tonight with Dr. Jay D. Hair, President of the National Wildlife Federation. Dr. Hair is the world's leading conservation executive, heading the largest conservation organization in existence today. The National Wildlife Federation is five times larger than the nearest

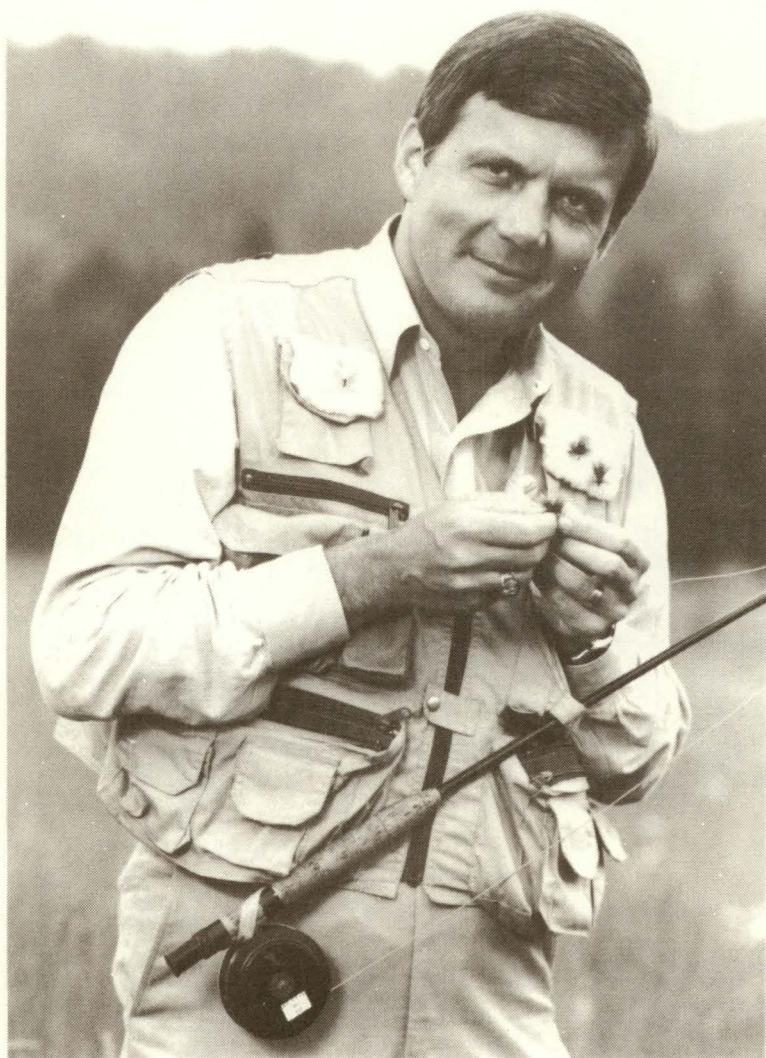
competing group; it has 4.6 million members and an annual budget of 60 million dollars.

In addition to his demonstrated leadership capabilities, Dr. Hair has scientific and scholarly credentials in the field to which he provides leadership and direction. He holds Master of Science and Ph.D. degrees in zoology. From 1977 to 1981 he was professor and administrator of the Fisheries and Wildlife Sciences Program at North Carolina State University. He was also a part-time Special Assistant with the U.S. Department of the Interior, where he was responsible for coordinating the development of a national fish and wildlife policy. Since he joined the National Wildlife Federation in May 1981 as Executive Vice President, he has earned respect as a proponent of a reasoned and balanced approach to wildlife conservation and wilderness issues in America. We are indeed honored to have Dr. Jay D. Hair with us tonight as our Wilderness Resource Distinguished lecturer.



Dr. Edwin E. Krumpe is the Director of the University of Idaho Wilderness Research Center.





*WILDERNESS:
PROMISES, POETRY,
AND PRAGMATISM*

Jay D. Hair

I deeply appreciate this opportunity to talk about wilderness to an audience surrounded every day by grand vistas and the grand issues that are their constant companions.

Today, Idaho has 3.8 million acres of federally designated wilderness. Still at stake are approximately eight million acres of roadless National Forest land that is eligible for wilderness designation. That is more potential wilderness than in any state except Alaska, and it is the cause of a great deal of debate. But Idaho is not alone.

Across the country, the debate about what to designate as wilderness is one of the most dramatic arguments on the

environmental front. The incalculable value of our natural legacy, the grandeur of wilderness, the economic impact of protection are all elements in that debate. That is why I have titled this presentation "Wilderness: Promises, Poetry and Pragmatism." Let me look at each of those aspects one at a time. First the promises.

Promises

By the time this nation turned its ingenuity to the *protection* of wilderness, it had nearly completed its *conquest* of wilderness. American pioneers, like people since Biblical times, fought the "wilderness" in a relentless drive for civilization. In a way they succeeded: When the 1890 United States Census was taken, the frontier land was officially declared "gone."

Only in the last few decades — in the decades of Bob Marshall, Olaus Murie, Aldo Leopold and others — have we at last realized that wilderness *is* a vital part of civilization. We finally comprehended that as we had conquered the wilderness, we had really destroyed a unique component of our natural heritage. By the 1960s, we fully realized our loss and began to accept our responsibility to protect the few wild places still untouched across our nation. So began the long and successful drive for passage of The Wilderness Act.

The Act was rewritten 66 times before it was finally passed by Congress and signed by President Lyndon Johnson on September 3, 1964. As you probably know, Idaho's late Senator Frank Church, a distinguished statesman and the lecturer for this series in 1977, was the Congressional floor manager for this landmark piece of legislation.

In passing the Wilderness Act, Congress sought to assure citizens that "an increasing population accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States." The legislation attempted — and I quote — to "secure for the American people of present and future generations the benefits of an enduring resource." And it recognized the value

of areas "where the Earth and community of life are untrammelled by man — where the imprint of man's work is substantially unnoticeable."

The goals were lofty. The promises were broad. But have they been kept?

Today, the National Wilderness Preservation System contains more than 88 million acres of world-class resources. It is the largest system of wild lands protection in the world, and the envy of other nations.

Nonetheless, wilderness covers less than four percent of the United States' total land mass. It is far less than we need. And it is far less than we promised to the American people when the Wilderness Act was signed. But even as we acknowledge that, we must ask: Why wilderness? Why should we maintain areas where humans and their works *do not* dominate the landscape? Earlier, I promised you poetry, and in poetry we find some answers.

Poetry

But I'm not a poet. I'm a scientist and a conservationist. So let me use the words of others who have captured America's deep need and love for wild places and wild things. First, let me quote from C. W. McCall, who is best known for such Country-and-Western hits as "Convoy" and "Wolf Creek Pass." In his poem, "Wilderness," he says:

Wake with me and feel the misty blue dawn,
Come hear the wild bird sing her morning song,
See the sun that only wilderness sees.
Then walk with me and let your heart be free.

And he continues:

Come with me and see the river run wild.
Come hear the canyon call her wandering child.
Breathe the air that only wilderness breathes.
Then walk with me and let your heart run free.

And now let me quote from Robert Service, the English-born, Canadian poet who immortalized the Yukon Gold Rush

days. One of his best known poems is "The Call of the Wild." In that poem, he says:

Have you gazed on naked grandeur where
there's nothing else to gaze on,
Set pieces and drop-curtain scenes galore,
Big mountains heaved to heaven, which the
blinding sunsets blazon,
Black canyons where the rapids rip and roar?
Have you swept the visioned valley with the
green stream streaking through it,
Searched the Vastness for a something you have lost?
Have you strung your soul to silence? Then
for God's sake go and do it;
Hear the challenge, learn the lesson, pay the cost.

Have you wandered in the wilderness, the sagebrush
desolation, . . .
Have you camped upon the foothills, have you galloped
o'er the ranges,
Have you roamed the arid sun-lands through and
through?
Have you chummed up with the mesa? Do you know its
moods and changes?
Then listen to the Wild — it's calling you.

And the last verse has a message for all of us:

They have cradled you in custom, they have
primed you with their preaching,
They have soaked you in convention through and through;
They have put you in the showcase; you're a credit to
their teaching —
But can't you hear the Wild? — it's calling you.
Let us probe the silent places, let us see what luck
betide us;
Let us journey to a lonely land I know.
There's a whisper on the night-wind, there's
a star a gleam to guide us,
And the Wild is calling, calling . . . let us go.

In fact, statistics indicate that more and more of us are answering the call of the wild. Why? Because in the wild, we find ourselves. In the wilderness, we find our links to yesterday and to eternity. Nonetheless, we still haven't done enough to protect that heritage. When it comes to the issue

of wilderness, we, like the renowned American poet Robert Frost, “. . . have promises to keep and miles to go before [we] sleep.”

Pragmatism

So far I've given you the promises and the poetry of wilderness. Now it's time for pragmatism. It's time to discuss the problems we face in a world growing more complex with each passing day. And it's time to expand the scope of this presentation.

Every environmental issue needs to be put into a larger perspective. While the focus of a given issue may be local, we must always remember that it is just one part of a set of global concerns.

So let me put the issue of wilderness into its global context: We live in a world where an unprecedented number of people are well fed, well clothed and well housed. Yet, we also live in a world where as many as 100 thousand people starve to death each day.

We live in a world of opulence, a world where last week a Japanese firm spent 40 million dollars for one Van Gogh painting. Yet, we also live in a world where more than 800 million people live in conditions the World Bank describes as “absolute poverty — life degraded by disease, illiteracy, malnutrition and squalor.”

We live in a world in which we consume well over a third of total terrestrial photosynthetic productivity!¹ And we live in a world in which, for the first time in the history of civilization, every human being is in contact with potentially dangerous chemicals from the moment of conception to the time of death.

The complexities and contradictions of contemporary society are evident in other ways as well. For example, in recent years, society has made stunning technological advances in medicine, space exploration, global communication systems and agricultural productivity. Our

learning curve is so advanced that, at any given moment, we can measure the distance between the Earth and the moon — which is almost a quarter of a million miles — and be off by less than half-an-inch. That is an amazing accomplishment. Yet, what we *don't* know is even more amazing.

For instance, we don't know how many species of life share this planet with us humans. According to E. O. Wilson of Harvard University, "We do not know, even to the nearest order of magnitude." ²

We know that about 1.7 million species have been formally named since Linnaeus inaugurated the binomial system of scientific nomenclature in 1753. In the 1960s and '70s, a few scientists estimated the world's total number of species as high as 10 million. Then, in 1982, after an intensive sampling of tropical rain forests, others raised the estimate by threefold.

So how many species live on Earth? The answer is still a mystery, and it has a direct relationship to our need for protected wilderness ecosystems.

Because, of even greater concern, is scientific evidence that we are witnessing the global destruction of world-class wilderness ecosystems — particularly tropical forests. If unchecked, that process will culminate in the summary elimination of millions of species. Norman Myers noted recently, "Of all the environmental assaults we are mounting against the Earth, mass extinction will be the most profound."³

Isn't it ironic that just when we are learning so much about the origins of life, we are also allowing so much of life's biological diversity to disappear? Isn't it tragic that just when we are learning how to improve the quality of life through spectacular advances in bio-engineering and associated technologies, we are also allowing entire stocks of genetic materials to be eliminated?

Those are elements of the global picture. But how do they relate to the protection of wilderness areas in Idaho or even in North America? To some, it may seem a tenuous connection. To others, it may appear irrelevant. It may seem like just another aca-

demical question. I hope to convince the skeptics otherwise. Because our need for wilderness is more than just aesthetic, more than just spiritual, and more than just poetic. Our need for wilderness, perhaps most of all, is scientific and economic.

Let us first examine the scientific values. As the basic unit of evolutionary biology, the species is also the basic unit of ecology. An ecosystem, comprised of species in association with their environments, is best understood when we can divide it into its component parts.

Then we can understand the relationships within and between species and their habitats. If we do not have intact natural ecosystems — such as those found in large, undisturbed wilderness areas — then we severely limit our global — and our local — opportunities for studying the determinants of species diversity, population regulation, energy cycles, nutrient flows, social systems and community structure.

All are critical to understanding how natural ecosystems function — whether it is the relationship of elk to their habitat in Idaho or the relationship of humankind to the biosphere.



Dr. Maurice Hornocker, associated with this university and the National Wildlife Federation, showed us that in seminal research which he and his colleagues conducted on mountain lions in central Idaho. His long-term research project demonstrated the relationships between mountain lions' intrinsic behavior and the wilderness areas they inhabit. Most important, his research highlighted the fact that knowledge about the *effects* of species on their habitat is essential if we are to make sound management decisions for the future of any ecosystem. Too little research of this type is being conducted today, and we need to understand why.

After all, most in society agree that scientific inquiry is essential if we are to understand the world around us. And most in society agree that such knowledge is highly valuable in formulating solutions to resource management problems. Therefore, why has so little long-term research about appropriate wilderness-related topics been undertaken? Partially because many in our society can't see the importance of wilderness ecosystems until they are shown their economic values.

So let me do just that—first on a global scale and then with an example from Idaho.

Worldwide, every time a prescription drug is bought, there is a 50-percent chance that the purchase owes its origin to materials from wild organisms. In the United States, the annual commercial value of these medicines is approximately 14 billion dollars. Around the world, the commercial value tops 40 billion dollars a year.

In other words, the pharmaceutical industry has an enormous stake in the health of worldwide wilderness ecosystems. If the current rate of global habitat destruction and species loss continues, the pharmaceutical industry — and humankind — will be denied opportunities to discover new drugs to end the suffering and death of millions.

A recent Congressional advisory group found that species are disappearing at a rate perhaps not seen since the loss of the dinosaurs 65 million years ago. At this rate, an average of 100 species may become extinct *each day* by the turn of the century. Most extinctions will take place in tropical wilderness areas — like those in Madagascar.

The Madagascar forests, for instance, are the native habitat of the rosy periwinkle. That species contains alkaloids that have yielded two potent medicines against a variety of blood-related cancers. To date, more than 93 percent of Madagascar's forests — including habitat for rosy periwinkles — have been destroyed. More than half the native plant and animal species are presumed lost.

The National Cancer Institute has reported that in the Amazon Basin alone there are undoubtedly several other species of plants that could yield "superstar" drugs against cancer. But we may never even know their names because, sadly, as the world loses wild things and wild places, we also lose the myriad benefits they have held secret from humankind.

Now, let's turn homeward, to Idaho. People come to Idaho for a lot of good reasons. For the breath-taking scenery, the forests, the sparkling trout streams and the wild, untouched lands. They come to Idaho for what those of you who are residents already know. They come for Idaho's spectacular outdoors—they come for the wilderness.

The National Wildlife Federation and our affiliate, the Idaho Wildlife Federation, recently asked 11 thousand nonresident hunters about Idaho's public lands. An overwhelming 87 percent supported the designation of *more* wilderness in the state. Less than five percent of the respondents opposed more wilderness designation. At the same time, more than 68 percent of the hunters said they were satisfied with their hunting experience last year.

What does the survey really illustrate? That Idaho's natural amenities, while important for their aesthetic values, are also important for their tourist and economic potential. The hunters we surveyed will be back next year — and the year after — to pursue recreation in Idaho. So will thousands of others. And they will all bring their checkbooks.

The tourism industry in Idaho has become the state's leading employer, and now rivals traditional industries such as agriculture and mining in overall economic impact. For example, during the 1984-85 outfitting season, nearly 70

thousand people hunted, fished, skied, mountaineered and otherwise took advantage of Idaho's outdoor resources.

They spent more than 19 million dollars in outfitting and guide activities. Of that amount, nearly 15.5 million dollars stayed in the state. Additionally, the outfitting and guide activities stimulated 24 million dollars in adjunct services for a grand total of more than 38 million dollars poured into the state's economy. The activities created more than 700 full-time jobs.

The 1984-85 season was a record-breaker for the recreation industry in Idaho. And the trend should continue, in Idaho and elsewhere. In the Pacific Northwest, it is estimated that even if all recommended wilderness areas were designated as such, demand for recreation by the year 2030 would still exceed the region's capacity by 50 percent. The economic potential in wilderness is enormous.

The pragmatic — or economic — value of wilderness has not settled the debate about wilderness. The search for a balancing of priorities continues. It is little wonder, because the questions surrounding wilderness are thorny.

In our multiple-options society, how do we provide enough timber to meet our nation's needs while increasing the size of our wilderness system? How do we decide between resources needed for "national security" — resources like minerals, oil and gas — and the resource of land; which warrants protection for its wilderness values?

How do we meet the ever increasing demand for dispersed wilderness recreation — for hunting, fishing, backpacking, rafting — and still maintain the solitude that is central to the "wilderness experience"?

Developing Responsible Options

Do I know the answers? No. I'm not even sure I know all of the questions. However, let me offer some thoughts about how to develop responsible options.

First, we need long-term and properly funded research to provide the kinds of information required to understand

complex ecosystems and to resolve complicated public policy and resource management issues.

Let me give you a “real-life” example of how the lack of such long-term research has produced a massive, national environmental conflict. In 1980, when the Alaska National Interest Lands Conservation Act became law, its Section 1002 set aside 1.5 million acres of the Coastal Plain of the Arctic National Wildlife Refuge for further study of its natural resources and potential for oil and gas development.

Although the Coastal Plain — or the 1002 area, as it is commonly called — is a relatively small part of this 19-million acre wildlife refuge, it is considered the most biologically productive area. It includes the primary calving ground for the internationally invaluable Porcupine caribou herd. This area, as part of an undisturbed arctic ecosystem, is of world-class stature. In fact, the land adjacent to it to the east and south has already been designated as “wilderness.”



Now, seven years later and with virtually no comprehensive research data in hand, the U.S. Department of the Interior is proposing that the entire area be made available for leasing and full oil field development. Congress faces two diametrically opposed pieces of legislation: One for total wilderness designation and the other for total development.

Once again, we are poised for a bitter battle where emotions are high, facts are few, and a number of important national issues are at stake.

What happened? Why do we find ourselves at the edge of a "black hole" of public policy, asked to take a leap of faith into the unknown? Sadly, the answer is simple: In the "what you don't know won't hurt you" theory of government that has dominated Washington, D.C., in recent years, political ideology prevails over knowledge.

Some people — including those in the Reagan Administration — have clad the need for oil and gas development in the patriotic cloak of "national security." The administration would rush the nation into a decision about oil field development, in spite of knowing very little about the possible impacts on one of the world's most sensitive ecosystems.

Questions That Must be Answered

We have not answered questions that must be answered before a Congressional decision can be made about opening the Coastal Plain of the Arctic National Wildlife Refuge to oil development or maintaining its current protected status. For example, do we really know enough about the potential oil reserves of the 1002 area? No. And I believe we must know what exists there even if we decide that the nation's best strategic course requires deferral of extraction for another 50 years.

Other questions linger. For example, do we really understand the probable impacts of development on the internationally invaluable Porcupine caribou herd or on the area's musk oxen population or other fish and wildlife

resources? *No.* Do we know the environmental impacts of full oil field development on the area's air and water quality or the effects of toxic substance bioaccumulation? *No.* Has anyone evaluated the cumulative impacts of circumpolar development on the arctic environment and its wild living resources? *No.*

I could go on, but I think I've made my point. A coordinated, long-term research program was not undertaken before the critical question of oil and gas development in this arctic ecosystem was presented.

The Arctic National Wildlife Refuge is not the only such instance. We continue to make the same kinds of mistakes on a wide range of important public policy issues. Our society must learn that in order to make responsible decisions among competing and complex choices, all interests will be best served if better science and enhanced information transfer become more integral elements of the public decision-making process.

Surely, if we can commit billions of research dollars to the development of a dubious space-based defense program, then we should commit millions of dollars to environmental research designed to understand the life-support systems of this planet of which we are but one part.

No Better Gift

In the very early 1960s, President John Kennedy pledged to put a man on the moon. In 1969, we accomplished that feat. Wouldn't it be just as worthy of a President today to commit our nation to a comprehensive inventory of the world's wild living resources by the year 2000? Aside from a world at peace with itself, I know of no better gift we could leave to the children of the 21st century.

Let me make a couple of final points about the process of scientific research.

One of the most important lessons I learned about scientific research came during my graduate school days at the University of Alberta in Canada. I had just presented to

my major professor the data from my doctoral dissertation on the quantification of the structures and function of a complex biological community.

Without a word, he looked carefully through my reams of computer printouts and graphs. After an hour or more, he looked up and said, "these are the most incredible answers I have ever seen Do you have any idea what the questions are?"

Whether by design or chance, his response sent a tidal wave of fear through me. Fortunately, after I regained my composure, I convinced him that I did, indeed, have some idea of what the questions were.

The point he made so succinctly has remained with me: Scientific research is conducted within a framework of developing and testing hypotheses. That lesson must apply as we try to answer scientific questions relating to wilderness ecosystems.

Frankly, we need to generate and test more rigorous hypotheses at every stage of the research process. Likewise, we need to reallocate our research priorities and our research dollars. Haven't we "counted" enough elk feces? Do we really need the 10 thousand and first research project on the white-tailed deer when the species is flourishing, and at least 10 million dollars have been spent on research since 1950?

Wouldn't it be more valuable to fund long-term research programs into such questions as: How do wilderness ecosystems function? What species are present? What is their relative stability over time? What variables are most critical? What happens when they are perturbed by natural causes? By human activities? What resource management knowledge can we apply to nonwilderness areas?

And wouldn't it be more valuable to quantify the demand curves for wilderness recreation or its contribution to our Gross National Product? Wouldn't it be more valuable to assess our land management policies regarding *all* public lands in order to determine how much acreage should be designated as "wilderness"? Wouldn't it be more valuable to

evaluate how many miles of roads we can build in our national forests before we end up with a highway system separated by strings of trees and silted streams instead of an integrated forest ecosystem capable of sustaining a broad array of renewable natural resources?



And, finally, given the scale of the worldwide destruction of wilderness ecosystems and the limited financial resources at our disposal, wouldn't it be prudent to systematically identify those areas of greatest importance and aggressively proceed to protect them? This priority ranking approach, sometimes known in medical circles as a "triage strategy," would not be without controversy. Who decides, for example, what areas are most important?

However, as Norman Myers recently noted, far from seeking to establish quantification of all critical parameters, a triage approach tries to identify all relevant sets of values in order to illuminate an unduly confused situation.⁴ Such an

approach would bring a degree of order to the current haphazard process and allow us to make the best use of available financial and other resources. By emphasizing the protection of entire communities of species or entire ecosystems, we could avoid the moral dilemmas inherent in a triage approach as it relates to saving individual endangered species.

In short, we need more emphasis on the importance of natural resources-related scientific and socioeconomic research to meet the needs of modern society. And we need to approach such research more creatively, even if it generates some controversy.

A New Attitude

In addition to a new research direction, we need a new attitude. First, it is important to remember that science is only orderly after the fact. During the research process — and particularly on the frontiers of research — science can be chaotic and fiercely controversial. Likewise, we need to be more cautious in characterizing research as either “basic” or “applied.” While there may be some truth in the definition that a “specialist” is someone who “knows more and more about less and less,” there is another side to that coin. A tremendous idea in science often appears to have its birth as a particular answer to a narrow question. Many times, it is much later that the ramifications of that answer become apparent. What began as knowledge about very little often turns out to be wisdom about a great deal.

As Louis Pasteur said, “There is no such thing as applied science. There are only applications of science.”

Second, we must bury the adversarial relationships that have existed too long among various sectors of our society. Isn't it time that the timber industry and conservation interests stop drawing battle lines and start charting an effective and positive strategy for both economic development and enhancement of the wilderness system? Can't we agree that if we bring better information and less rhetoric to the decision-making process, we will produce better public policies?

Finally, we must do a far better job of moving new information into the public policy and resource management arenas. Relevant research must reach the table where decisions are made.

From the applications of science will come understanding. And from understanding will come new and creative opportunities for meeting the needs of society. Acting on those opportunities will present a challenge to all of us. In order to meet those challenges, we need leaders who can set aside narrow, provincial thinking and adopt the broader goal of a nation secure in both its economic vitality and in the conservation of its natural resources. A nation whose people, while first and foremost Americans, are also citizens of the world.

We need leaders who are willing to take risks, but not with the health of our environment or the natural heritage we hold in trust for future generations. We need leaders to educate our society and provide the scientific knowledge for continued advancement. We need leaders from all walks of life who have inspired visions of a better tomorrow and a sense of stewardship for those yet unborn.

Finally, as we face the leadership challenges, we should take to heart the words of a great conservationist, President Theodore Roosevelt: "Far better it is to dare mighty things, to win glorious triumphs, even though checkered by failure, than to take rank with those who neither enjoy much nor suffer much because they live in the gray twilight that knows not victory nor defeat."

We must resolve not to live in that gray twilight but, rather, to search the vastness of wild places for that which we have lost — and for that which we have not yet found. We must "hear the challenge, learn the lessons, pay the costs." For ours among all generations is, literally, being given the last chance to save the best of that which remains of our wilderness heritage. We dare not fail our duty.

NOTES

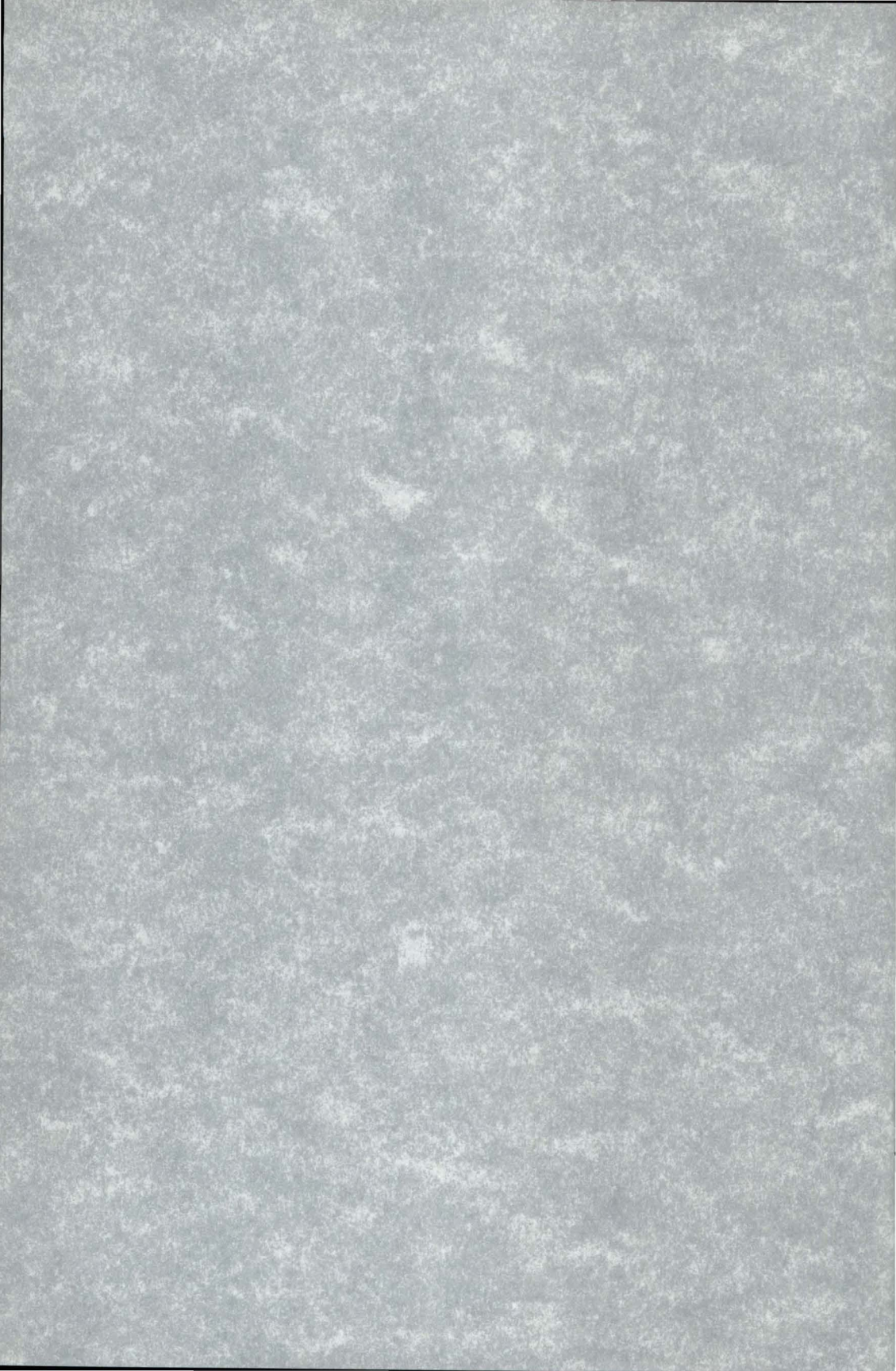
¹ P.H. Raven. 1986. "We're Killing Our World." AAAS Keynote Address, Chicago.

²E.O. Wilson. 1985. "The Biological Diversity Crisis: A Challenge to Science." *Issues in Science and Technology* (fall).

³ N. Myers. 1986. "Tackling Mass Extinction of Species: A Great Creative Challenge." Albright Lecture. University of California, Berkeley.

⁴ *Ibid.*



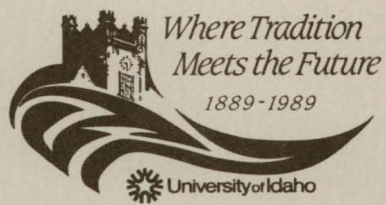


The University of Idaho Wilderness Research Center has initiated the Wilderness Resource Distinguished Lecture-ship as an annual event to encourage constructive dialogue and to broaden understanding of the wilderness resource. Speakers are invited on the basis of contributions to the philosophical or scientific rationale of wilderness management.

Other activities of the Wilderness Research Center include promotion of sound methods of protective management; stimulation of interdisciplinary research; support of a graduate student assistantship and of summer research projects for undergraduate students; sponsorship of annual field trips for Wildland Recreation Management students; and other similar wilderness-related activities appropriate to the mission of a land grant university.

Support for the Center or for its specific projects is welcomed in the form of gifts and bequests. For further information, contact

*Dr. Edwin E. Krumpe, Director
University of Idaho Wilderness Research Center
c/o The College of Forestry, Wildlife
and Range Sciences
Moscow, Idaho 83843*



*Where Tradition
Meets the Future*

1889-1989



University of Idaho