Are Current Fire Management Activities Compatible with Park and Wilderness Values?

A PANEL DISCUSSION

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Dr. Jones: The preceeding speakers have discussed "Fire Management in the National Forests" and "Fire Management in the National Parks," so we all should be well informed on what the current fire management policies are in the Forest Service and the National Park Service.

Fire has always been man's greatest friend and his greatest foe. We associate fear and destruction with the very word "fire." We are constantly being reminded to be careful with fire, to put our cigarettes out, to drown our campfires, and to be alert for fire hazards in our homes and at our jobs. We have always evaluated the activities of our fire people on their ability to find the fire, get to the fire, and to put it out. Our policy has been that all fires were bad. Through knowledge gained from research and experience, our attitude toward wildland fires is changing. Fire has a role in the management of wilderness. Fire is a working tool in the intensively managed forest.

How well the public, who owns the lands we manage and protect, understands the new philosophy of "fire management" could be the subject of another seminar.

Several years ago, when the pack mule was our first line of fire defense, Northern Regional Forester Major Kelly received a frantic call from the Superintendent of Yellowstone National Park for assistance in combating a raging fire in the park. That evening, when the eastbound passenger train stopped in Missoula, Major Kelly loaded the baggage cars with mules and shipped them off to Yellowstone Park. The mules were the heros of the day, and the fire was put out.

With our present air force of slurry bombers, helicopters, and a brigade of smokejumpers, if a similar fire occurs next summer chances are both the Park Service and the Forest Service would calmly watch the fire burn.

Our panel this afternoon is a distinguished group of experts in fire management and wilderness. Each panel member has a unique background. I am looking forward to their answers and views to the challenging question, "Are current fire management activities compatible with park and wilderness values?"

Mr. Barnett: In preparing for this presentation, I found that I had some misconceptions about the current fire management activities in parks and wilderness. I had heard of the "let burn" concept being

advocated and practiced in some places, and had visions of large-scale, raging wildfires running through these single-use areas and out into the non-designated multiple-use areas. I had been unsure of the policies of the land management agencies with respect to fire suppression activities in the parks and wilderness areas where let-burn was not the policy, and I imagined the worst situations of no activity or activity so restricted that it would be futile.

Happily, I found that none of this was true. In reviewing the policies and procedures of the agencies responsible for protecting these areas, I found a common denominator and keyword in the word "management." Natural fires are not permitted to burn nor prescribed burning done for no apparent reason. Burning must be a part of a resource management plan thought out in advance and with a specific purpose in mind.

Fire has historically been a part of the natural ecosystems of the West. It is recognized as one of the ecological factors contributing to the perpetuation of plants and animals in a given habitat. The need to preserve a diversity of these ecosystems, to present natural conditions, as well as protect other wilderness values that may be the basics of the resource management plan and may define the role of fire and the extent of its use. However, whenever and however fire may be used it must be contained within predetermined fire management units if other values such as the goods and services of the area are also to be preserved. Some of these values which could be impacted by uncontrolled fire are air and water quality, aesthetics, recreation and safety of life and property.

Like other forms of management, fire management is one of decisions and trade-offs. Decisions as to areas where fire may or may not be permitted are based on an assessment of the values at stake, local conditions and the environmental consequences of alternative courses of action. They are predetermined to the fullest extent possible but may be tempered by at-the-time and on-the-spot conditions. Where fire is not permitted or threatens to go beyond the prescribed area prompt action to suppress it is taken. Suppression techniques used are those best suited to contain the fire and still maintain as much of the original condition of the area as possible. In wilderness areas the use of machines is restricted to a greater degree than I feel

necessary, but the commitment to suppression and protection of the remaining values is there.

Previous speakers have described the value of controlled fire in the maintenance of ecosystems, improving wildlife habitat, regeneration of certain species, and generally improving the aesthetic and recreational values of an area. Other speakers have detailed the actual fire management philosophies and procedures of their particular agencies. By now we have all learned the differences between wildfires, benign wildfires, prescribed burning, controlled fires and the other terms used. We have had the reasons for the decisions to burn, let burn or not burn pointed out to us.

I interpret my role on this panel as one of listening to the facts and philosophies presented here today, evaluating them along with the information I have learned over the years or in preparation for this assignment and expressing an opinion as to the value of the activities previously outlined. I am a believer in the role of prescribed fire in forest management. The mere fact that the fire resulted from natural or outside causes does not, in my opinion, lessen its value.

For the reasons I have enumerated I say, yes, the current fire management activities are compatible.

Mr. Craig: The American Forestry Association is a predominantly lay organization of 80,000 members organized in 1875. Scratch any longtime AFA member and you discover a fireman. For nearly 100 years they have supplied lots of muscle in obtaining funds for your fire programs. Foresters have trained them well. They accept as gospel that fires should be prevented and if not prevented, fought and put out.

For them this indeed is a time of change, as Hank DeBruin said this morning. As another speaker indicated this morning, we have also been hearing from our Trail Riders of the Wilderness. Just what happened when the packer and timber operator took over after the two foresters, I don't know, but they came out of the Selway Wilderness hot under the collar. However, I do not want to give the wrong impression here. Actually most of our 6,000 Trail Riders are somewhat more receptive to the idea of prescribed fire than two other categories. Physicians, who represent our biggest percentile of membership, 11 percent, are avid

Trail Riders and moreover prescribe Trail Riding for patients as useful therapy. These people have a certain kinship with all forms of scientific investigation as they are curious people.

No, the flak is not coming from them except in certain cases. The flak, and this should concern you, is coming from property owners, those people who own second homes in such areas as the Adirondacks, the Rockies and California. Many of these people do not like risk, even calculated risk. Moreover, they are people of substance, articulate, and have considerable impact. The other category consists of some of your own people—old line Forest Service and private land foresters who have a built-in skepticism about any new idea that seems to encourage their arch enemy fire. These people see terrible risks involved here and they even go so far as to say that taxpayers should not have to pay for those prescribed fires that get away—the people who start them should. Others are writing us long letters quoting the fire gospel not only of Smokey Bear but also of such past worthies as the two Roosevelts, Pinchot, Greeley, and so on.

The message of these old guardsmen to you is that some people seem to have very short memories. Fire, they admit, is a part of the natural scene. But 200 million Americans have changed the natural scene and that should never be forgotten. And a fire is a fire whether it is touched off by human hand or by a lightning strike. They concede fire *can* be a useful tool in the hands of the skilled practitioner when conditions are right. But old timers on our Board strongly urge that Man, not Nature, must always be the master. Frankly, some of this talk about fires being perfectly natural and Nature's way of doing things scares them stiff. In short, it's not so much the tool that worries them but what is said about it and how the idea is projected to the public. Some of you have also said as much here today.

Now, we've tried to keep abreast with these new developments in *American Forests,* although we've sometimes been scarred for our efforts. What do we need to do?

1) Perhaps AFA should have a fire conference like this in Missoula. It would be a big one.

2) We've probably got to hammer harder on this idea of fire as a

prescribed tool for wilderness and similar areas. And I might add that some believe that sanitation cutting would be an even better tool—and a safer one.

3) Above all we've got to impress on people that if fire is not all bad, neither is it all good. This will require finesse in communications.

In conclusion AFA is a conservative organization and we are proceeding on this conservatively. We do not believe, honestly, that it is as easy as some have indicated here today. We should level with the public in candidly stating that grave but calculated risks are involved here. Mistakes have been and will be made. (One got away last week on the St. Joe, I understand.) And we should never forget that many people have a deep fear of fire.

Dr. Lucas: Our panel is assigned the question: "Are current fire management activities compatible with park and wilderness values?"

This would be relatively easy to answer if "current fire management activities" in such areas were uniform and consistent, but, of course, they are not. They are diverse and highly variable from area to area, and are changing rapidly. So, to answer the question, we must define the particular management activities being evaluated rather than referring to some well-developed, overall program.

Furthermore, the question is made more complex because "park and wilderness values" are also mixed and variously interpreted by different people. I take the position that in classified wilderness the primary objective is the maintenance, in a large area, of natural processes and the resulting environment and plant and animal communities. The "recreation" in such areas is or should be based on the experiencing of a natural environment under conditions of relative solitude and in the face of the challenges such an environment poses.

From this basic premise, I conclude that wilderness fire management activities that move toward a natural role for wildfire are compatible with wilderness values by definition. And the farther the actions move toward a natural, unrestrained role for wildfire the more compatible they are. This is very simple and too obvious to require elaboration. (This is not to ignore the practical, real world constraints on a completely natural fire regime.)

But, rather than stop here—with nothing left to debate—let's exam-

ine the assumption about wilderness values in more detail. The premise I stated is one interpretation of the legislation that established the National Wilderness Preservation System. The major alternative viewpoint emphasizes primitive recreation and sometimes leads to support for some degree of environmental manipulation to enhance recreational opportunities. Wildlife habitat might be improved, scenic quality protected or upgraded, etc. From this perspective, the answer depends on the specific situation. Will a certain fire management activity (such as non-suppression) lead to an increase in elk, wildflowers, or berries? Or might it lead to montonous, large, uniform vegetation blocks, or accelerated erosion and siltation? The questions become essentially the same as would be asked about fire effects on any non-wilderness land.

There are wilderness visitors and other interested people who take each of these two positions on wilderness objectives—and many intermediate positions as well. I suspect that a more natural role for fire would produce benefits as defined from the primitive recreation viewpoint more often than not, especially if viewed over a fairly large area and over some extended time, say 10 years or so. However, there would be numerous natural fires under such a policy that many recreation-oriented people would find undesirable, although, to repeat, they are all desirable from the natural process viewpoint.

Therefore, fire management programs cannot simultaneously seek to meet both recreational and natural process objectives on the same area. The constraints needed to protect recreational values would result in a far from natural role for fire. This is especially true because our presently limited ability to predict the effects of fire on recreation values would probably lead to rather conservative guidelines and severe constraints.

It seems more desirable to recognize a need for more than one type of roadless area management. Wilderness could continue to be devoted to natural processes and the challenging encounter with the resulting environment, with fire a more prominent part of it. Some other lands could be managed for non-wilderness, roadless primitive recreation. Here, fire would be a managerial tool to be directed, rather than a natural force to be left as undirected as possible.

There are many good reasons for such a distinction in objectives.

To mention only two, visitors' needs and desires would be much better met than by wilderness alone (*Whichever* emphasis might be given to wilderness management), and scientific values of wilderness would be better served. Fire management considerations strengthen the case for such a diversified system, I think.

But, for now, how compatible are the values of wilderness visitors with more natural fire management? More compatible than generally thought, I believe. Most wilderness visitors do *not* oppose a greater incidence of wildfire, and a fair proportion favor it. (A good many are fence-sitters.)

These general observations are drawn from a study of 1971 Selway-Bitterroot visitors by George Stankey. They are very conservative; almost surely knowledge of wilderness fire has increased and attitudes shifted towards greater acceptance since 1971. Publications dealing with the natural role of fire in wilderness have been much more common the last few years than before. Stankey's study showed a substantial positive correlation between level of knowledge about fire's natural role and support for modified or limited suppression of wilderness fires. In addition, all of the wilderness fire articles I have read are basically sympathetic to the emerging policies.

A combination of information efforts to explain fire's role in wilderness combined with a program to provide better, more obvious alternatives for the person who values primitive recreation experiences above the natural environment should enable one to answer the question of compatibility with a firm "yes."

Ms. Milner: The signing of the Wilderness Bill into public law on September 3, 1964 was a monumentous occasion for the many citizens who believed firmly in the wisdom of establishing a wilderness preservation system for this Nation. Joyful though the occasion was, and great the satisfaction at obtaining the goal, there was no escaping the hard fact that passing a law to preserve wilderness was only the beginning of preservation; only the first step. It had been a tough step, taking as it did some 65 different drafts and bills, and almost 10 years of bitter haggling to get up the first rung. The actual process of preserving the "wild character" of wilderness in the physical sense is proving to be an equally trying task.

Let us review the actual mandate in the Wilderness Act for main-

taining the natural character of wilderness. The Act defines wilderness, in part, thusly: "An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, *which is protected and managed so as to preserve its natural conditions . . .*"

To define policies on paper is one thing, to implement them, quite another. The wilderness would be used by many diverse interests—back packers, horseback riders, fishermen, prospectors, scientists, hunters, outfitters, and others. There will be intrusions from the outside world—flight paths, powerlines, water impoundments, subdivisions on the borders, weather modification, etc., etc. All will have their impacts on wilderness and the preservation of the natural biotic communities. But no area of management seems to have quite the magnitude as that of identifying, defining, and controlling the role of fire as part of the system of preserving the natural character of the parks and wilderness areas.

I noted in a 1973 report for the *National Commission on Materials Policy,* by the NAS and NAE, the following comment on fire: "In the United States a forestry practice that has induced a major long-term departure from the natural state has been the national effort to prevent and combat wildfires. Reduction in the area burned annually and in the intensity of wildfires has substantially modified the environment."

The role of fire in our natural world and its importance to the biotic communities over time has not gone unnoticed by ecologists, biologists, botanists, and those in other scientific disciplines. Considerable data has been gathered on the subject, and the picture of the inter-relationship between fire and plant and animal communities is becoming increasingly clear.

Such scholarly observers and scientists as Myron Heinselman, Richard Vogl, Starker Leopold, Ira Gabrielson, and others, have prepared detailed reports on the results of fire suppression in the natural forest system. Heinselman, in his report, *Preserving Nature in Forested Wilderness Areas and Parks,* gives great support to symposiums such as this one when he points out, "*Fire policies and programs need discussion* because fire is such a powerful environmental

factor, and because it is one of the few major disturbances over which we exert control." He goes on to point out later that we are greatly reducing the area burned in many natural reserves where fire was once the single most important factor in generating new successions.

National parks, which were established so that the American public would have for all time real live "museums of natural history", should also have a fire management policy which acts to preserve the natural sequence of nature in so far as it is possible.

In a preliminary report, *Bringing Fire to the High Country Forests,* Bruce Kilgore and George Briggs pointed out that from the 1920's until 1968 all fires were attacked as soon as possible in the national parks and held to the least possible area. Such a policy tended to eliminate the effects of naturally occurring wildfire and favored the development of a vegetative mosaic different from that which would have occurred if fires burned naturally. The national parks have had experience with the suppression of fire and the devastation it can work on natural areas when one finally goes. The disastrous wildfire near Grant Grove in 1955 gave vivid witness to the effects of fire suppression when it swept up from the McGee Ranch west of the Grove and within a few hours devastated more than 12,000 acres of brush and forest and threatened the Grove.

The Leopold report of 1963 pointed out that "much of the west slope (Sierras) is a dog-hair thicket of young pines, white fir, incense cedar, and mature brush—a direct function of over-protection from ground fires."

The report went on to say "A reasonable illusion of primitive America could be recreated, using the utmost skill, judgment, and ecologic sensitivity." This report eventually led to a new fire policy for national parks, which states:

> "The presence or absence of natural fire within a given habitat is recognized as one of the ecological factors contributing to the perpetuation of plants and animals native to that habitat."
>
> Natural fires ". . . are recognized as natural phenomena and may be allowed to run their course when such burning can be contained within predetermined fire management units and when such burning will contribute to the accom-

plishment of approved vegetation and/or wildlife management objectives."

Kilgore and Briggs point out that this modification of fire suppression is in line with the original statement of purpose for the National Park Service, which was to conserve the scenery and the natural objects and wildlife by such means as will leave them unimpaired for the enjoyment of future generations.

The Montana Wilderness Association supports the philosophy that fire is a necessary tool in preserving the natural ecosystems in the national parks and in established wilderness areas. We adopted the following position on fire in wilderness at the annual meeting in 1973:

WILDERNESS FIRE RESOLUTION

WHEREAS:

Wilderness is a finite and irreplaceable resource and it is imperative that we perpetuate the high quality of this Wilderness resource in keeping with the Wilderness Act:

". . . earth and community of life are untrammeled by man . . . land retaining its primeval character and influence . . . area affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable . . . ."

AND WHEREAS:

Fire has been a significant natural force within Wilderness ecosystems over evolutionary periods of time; and natural selection has resulted in adaptations of species to a fire environment; thus naturally-evolving ecosystems in Wilderness have great value to society as ecological baseline communities and gene pools.

AND WHEREAS:

Fire exclusion results in changes in Wilderness such as an unnatural accumulation of fuels in some ecosystems resulting in a potential for unnatural fires, and changes in the variety of vegetation and animal species. Fire control activities including firefighting techniques and installations of improvements, etc., have

potential impacts on Wilderness and should be carefully evaluated and applied to minimize these impacts.

THEREFORE LET IT BE RESOLVED:

That the Montana Wilderness Association adopt the philosophy that naturally-occuring fires in Wilderness are an integral part of the Wilderness resource,

and that our position is that such fires should be permitted to assume their natural role limited to constraints necessary to protect human life and property and resources outside of Wilderness.

and that firefighting and other fire management activities be conducted in a manner which results in a minimum impact on the Wilderness resource.

BE IT FURTHER RESOLVED THAT:

The Wilderness managing agencies increase their efforts to complete Wilderness management plans that include a more nearly natural role of fire in Wilderness throughout the Nation.

In closing, I would like to quote once more from Heinselman. He says:

> "Preserving nature and managing natural parks and wilderness areas will require more research, more time, more money, and more people trained in ecology. We are not talking about preserving a few parks and wilderness areas to be used as giant playgrounds. We are talking about keeping our perspective on human life in relation to the earth's ecosystems. And we even may be talking about the survival of mankind! For if we are to understand the living ecosystems of the earth—the only life in our solar system as far as we know—then we must preserve this natural system."

Mr. Walker: Periodically in both the unfettered atmosphere of wilderness and the more confining reality of a "civilized" setting, I have pondered the question of how fire fits into park and wilderness management.

During my 5-year tenure as a wilderness resource assistant in

the Selway-Bitterroot Wilderness, I welcomed the opportunity to become involved during the conceptual stage of the White Cap Fire Management Study program. Later, I had the responsibility for applying the inventory and prescription methodologies developed by Aldrich, Mutch and others in the White Cap Study, to the adjacent Bear Creek Fire Management Unit. Based on such experience and personal philosophy, I hope to contribute to this panel discussion.

Reviewing the Wilderness Act in light of our assigned topic I think the key word by which to measure management activities in Wilderness is "untrammeled." Howard Zahniser, affectionately known as the "father" of the Wilderness Act arrived at this definition of *untrammeled*: "not being subject to human controls and manipulations that hamper the free play of natural forces." I feel that as long as agency personnel charged with fire management in the National Park System's natural and proposed wilderness candidate areas and the Forest Service's Wildernesses and Primitive Areas work toward the reintroduction of a more natural role of fire, we will be moving toward what Dr. Zahniser must have meant by "untrammeled by man."

We can expect the techniques and various research designs utilized to arrive at, or perpetuate, the "untrammeled" state to be subject to heated debate. However, as long as those charged with implementing these management programs are intimately familiar with their specific resource unit, the land, then the agencies present overall direction toward a more natural role of fire in wilderness is not only biologically sound, it follows the intent of the wilderness act.

Over the past 2 months or so I've spent the better part of 4 weeks visiting and revisiting both new and familiar country in the Selway-Bitterroot Wilderness and the Idaho Primitive Area. My purposes for these visits ranged from simple recreation and show-me trips to historical site documentation and dating of old structures.

The Selway country, in particular, has had an over-riding influence on my life for the past 6 years, as I've devoted much of my time and that of my family to gathering historical information in that wilder-

ness area. Through history I've come to realize that widnerness, man and land alike were in constant interaction with what we have come to talk about here today: FIRE!

In the diaries of Henry Pettibone and other Selway homesteaders, days of entries are devoted to the mention of "fires and smoke" on the hillsides around their cabins. I've experienced the thrill of discovering the remnants of such ancient cabins at Fish Lake, Running Creek and other remote places. Only when the excitement of discovery tempers, is one able to objectively view the setting, and contemplate the endless mosaic of vegetative types molded by the fires mentioned in those dusty diaries.

Young stands of lodgepole bump up against ancient spruce/subalpine fir forests on the one hand while brush fields lie among the Doug-fir and ponderosa pine stands, a living testament to nature's continual evolution.

Fire in the Rocky Mountains has molded much of the area's history. With current fire management policies and efforts exhibited in selected agency units, we are well down the road toward achieving a more natural and compatible role of fire in wilderness and park management.