Part I: Slide Presentation

(#1) This is a mountain...it is in Glacier National Park. (#2) This mountain and its neighbors rise above St. Mary Lake like the ruins of a great edifice erected by some race of giants. Such landscapes are superb aesthetic features. They stand on their own. Like an object of art—say, the Mona Lisa—such things speak to each person who beholds them. They speak in different ways, to different people. Such magnificent vistas are the stereotype one has of the scenery of all the old-line western National Parks. It is their display and protection, fundamentally, which justifies our National Parks.

Usually, however, after you've experienced the initial aesthetic impact of so splendid a scene, your awe and admiration slowly is replaced by a sense of wonder. You begin to think of causes—and effects—and you ponder on the great "powers of nature". At least, you do so if you're like most of our park visitors. You're not going to be satisfied with fairy tales, or just the Indian legends about these peaks, either. (#3) You're going to want the facts—you're used to getting the facts in all your activities, whether it's buying a new car, choosing from the dinner menu, or screening guests for your daughter's pajama party. Same with our mountains. You'll possibly want to get out into the hills and get these facts for yourself. If so, we have nature hikes, led by a naturalist, to help you do so. If you can't do this, you'll want the facts—or the theories, anyway—(#4) brought back by other people who have done so—the scientists who have explored them, and have determined how they got that way. We make these facts available to you. Possibly it is by a lecture, or through museum exhibits, or by illustrated booklets, or from an automatic visual device.

Take this landscape again, for example. The facts are that its story begins long ago, way back past the 1920's (when this picture was taken)—back into the vast reaches of geological time—back sixty million years, or more! (#6) That was when these mountains formed, as a great overthrust—a tremendous mass of very ancient Precambrian rocks which were pushed onto and across younger beds—a result of forces in the earth's crust so overwhelming as almost to be beyond our comprehension!
Then ensued countless millenia (#7), as storm after storm swept over this ancient highland and the waters spread from it as innumerable rivers (#8) and waterfalls. Erosion—the ceaseless wearing away of the rocks—continued for millions of years, even as it does today. The ancient mountains were finally worn down. (#9) Gorges and valleys; canyons and gulches; peaks and slopes—all were slowly carved out by these ceaseless agents of erosion. (#10) And then, finally, came that mysterious period—only yesterday, geologically—that we call the Ice Age or Pleistocene Epoch. The mountain valleys filled with slowly moving ice—great glaciers ground their way down the mountain slopes. (#11) You can still explore a glacier or two in the Rockies today. A couple can be seen in the Grand Tetons from the windows of the lobby just behind you. (#12) These modern glaciers are as nothing, however, compared to the huge ice masses of the Pleistocene. They're gone today, but we see everywhere the results of their work. We admire the valleys which they formerly occupied and scooped out. We recognize them as such by their open, free-way-like character; their high steep sides; their numerous rock-bound lakes. We recognize, as glaciated mountains, these bold pyramidal peaks, sharp crags and all the rest of their gothic-like natural architecture.

The story told by this landscape's natural vegetation goes back into time, too. As the Ice Age glaciers disappeared, they left behind them a vast expanse of bare rock surface. (#13) Onto these denuded and soilless rocks came primitive, pioneer vegetation. Probably first were the lichens (as in Greenland today); then came those grasses and arctic plants accustomed to life near the ice bodies. As time passed, and as the climate moderated, new cycles of plant growth came about. Who knows how many climax communities may have formed, only to be replaced later by another? Dominated by one complex of plants for a few centuries, (#14) changing conditions brought changing vegetation. Lakes would form only to be silted up and to disappear. Their flat beds would soon be covered by a grass community, punctuated here and there by more ornate flowering plants.

(#15) The mountain tops, still experience a severe climate, not unlike that of the Ice Age. Except for the lichens and tundra plants, they are still relatively bare. Below the timberline zone, however, sweeps the great coniferous forest, which different people variously call the Taiga or the North Woods. Along the streams are tenuous galleries of pioneer deciduous trees—aspens, birch, and their relatives. You can't help but wonder what the pattern will be, say, 10,000 years in the future! Certainly, it is likely to be quite different.

Well, that's the story; those are the facts. Your initial awe and plain aesthetic enjoyment was followed by curiosity. Our interpretive program answered your questions (many of them un-asked). In the learning process, you probably developed a renewed sense of awe,
not only just toward the symmetry and majesty of the mountain landscape as a natural art object, but even more so with the tremendously long and complicated series of events which led to the landscape you see today. You now have become involved—in a remote sense, at least—with the mountain. You now know its origins, its development from youth to maturity, so to speak and, (if we may humanize so inanimate a feature), you have learned of its many "problems" and viscissitudes. It's like making a new friend.

(#16) Not only that—you've been reminded of man's place in the great natural world—how we fit into the web of life—how we are part of the physical environment. That's what our interpretive program does—why it exists and has become so popular among the more enlightened—and, I may add, the more influential—park visitors. In a sense, it is an analysis of the many factors making up the big picture. But, in another sense, it's synthesis which draws upon the many details of an area's story which produce the Big Picture, but in a more meaningful frame of reference.

Part II: Unillustrated, Panel Presentation

Guests: Aubrey L. Haines, Park Historian, Yellowstone National Park
       Willard Dilley, Park Naturalist, Grand Teton National Park

The slides we have just seen hinted at what we mean by interpretation. The balance of our presentation will discuss how and why we do this. One basic point should be made. This work is not experimental—it's been going on in the Interior Department, National Park Service, since the days of Presidents Harding and Coolidge. It's fairly big business today.

Before getting underway, however, I should like to introduce two competent field practitioners of this "art." To my right is Willard Dilley, Park Naturalist of Grand Teton National Park. To my left is Aubrey L. Haines, Park Historian, Yellowstone National Park. Both men have had a number of successful years directing interpretive programs in the National Parks and can speak from current experience. Aubrey, what might be your comments on this matter?

Haines:

Yes, indeed, it's big business. In Yellowstone National Park last year, nearly six million interpretive contacts were reported, of which over four million were on a person-to-person basis. During July and August, we had over 42 seasonal ranger-naturalists on duty at nine different field stations taking care of our visitor needs in this field. It cost us some $42,400 to carry forward last summer's interpretive program, just for salaries alone.
Dilley:

Although we can't report so staggering a total of contacts in Grand Teton, we certainly agree that it's big business. Last year, we had over 1,300,000 total contacts, of which 315,000 were person-to-person. Visitors to Grand Teton totalled almost as much as Yellowstone's—about 1,800,000. In most cases, however, here in Grand Teton, the overwhelming proportion of contacts were made through some of the various self-guiding devices which we will probably talk about later.

Alberts:

Thank you, gentlemen, and let me mention that over the national Park Service as a whole, a total of 69,450,000 interpretive contacts were reported for 1959—the last year for which we have these data. 31,300,000 of them were "live"—person-to-person, that is. Out of 62,800,000 total visits to the parks that year, one out of two of our visitors had some personal contact with our program.

Benefits of a good interpretive program are primarily to the visitor himself. This activity is a public service. It gratifies deep seated visitor needs. Benefits of a well executed interpretive program to management are also numerous. Here are some of them: (a) Increased understanding of the area story and park significance, derived from the interpretive program, leads to better behavior on the visitor's part—less vandalism and littering of campgrounds, for example. (b) Increased understanding gives the visitor a feeling of personal involvement in the park; he recognizes it as an area reserved for him and his family, and for his descendants yet unborn. This leads to much more automatic public support for Service objectives, without our undertaking a big public relation campaign. (c) A tremendous amount of free publicity automatically results from these activities. At least half the visitors who take an interpretive walk or tour are amateur photographers. They show their slides or movies in their hometown vicinity all next winter. They'll quote the naturalist's plant identifications and explanation of phenomena, and can't help but present a pretty good image of the National Park Service and the Department of Interior to their audiences. (d) A going interpretive program provides a convenient means of explaining agency and departmental problems of current interest without engaging in a "crash" propaganda campaign. However, use of an interpretive program for this purpose must be done with great caution. For one thing, these are matters which you really can't trust to a seasonal GS-4 for proper coverage. Also, one of our traditional policies has been to avoid any attempt at what might be considered agency propaganda. That's why our programs are generally in good repute. Nevertheless, park and departmental policy matters, pertinent to the area and in which the audience is keenly interested, can and do receive occasional treatment
in these programs. Their presentation is likely to be in a more sympathetic vein than might be expected from some other sources.

These are some elements then, as I see them from my desk in our Regional Office. How about you field fellows, now?

Haines:

Yes, there is little question among the administrators in Yellowstone about the value of interpretive programs, not only in taking care of the basic needs of visitors for enlightenment, but in explaining certain acute area problems. Public safety and reduction of protection problems have been greatly helped by discussion of bear feeding and hazards to visitors which exist around geyser basins.

Dilley:

I, too, must comment affirmatively. Grand Teton has some very fragile back country wilderness which could quickly be ruined by random and unenlightened visitor behavior. We feel strongly that back country manners have been greatly improved by those hikers, who have become familiar with our problems in evening campfire programs. We are quite sure that the flower-pickers and souvenir hunters have learned to restrain themselves by a self-discipline induced, in large part, by our interpretive programs. Of course, we still must have a staff of uniformed rangers to enforce the necessary regulations, but their mission of protecting the park is greatly helped by the indoctrination provided through our interpretive activities.

Alberts:

So, we have seen more or less the why of an interpretive program. Now let us address ourselves to the how of it. We depend upon two major techniques. One is a sort of a people-to-people approach; the other is done through inert physical devices.

The "people-way" was our first. The Interior Department has been the leader in this field. We started back in the early '20's in both Yosemite and Yellowstone National Parks. The program slowly expanded through the '30's. Today, nearly every National Park has a well trained staff of such nature study experts on duty. The person-to-person approach covers a wide spectrum. At one end is the friendly information station attendant who helps the visitor decide how best to budget his time in the park. At the opposite pole (to mix our metaphors) are the all-day hikes. In a few areas, this technique includes two or three-day back country pack trips. These overnight trips have now generally been
abandoned, because of the necessity for staff use on less time-con-
suming work. In the middle of the spectrum, and the back-bone of our
program, are the nature walks and two or three-hour trail hikes, good
examples of which are scheduled here in Yellowstone and Grand Teton
National Parks. Probably half-dozen such guided trips are being con-
ducted within 20 miles of us at this very moment.

These trips represent the highest quality interpretation imaginable.
Here, the traveler, usually with his family, is in the midst of the
pristine woodland. His attention is directed by skillful naturalists to
the exciting world of nature all about him. Informal, but authoritative;
somewhat physically tiring, but still invigorating; confined to a specific
trail route, but with subject matter running the gamut from Precambrian
geology to contemporary conservation work, these excursions in the field
probably develop the most pleasant and lasting rapport between the tax-
payer and his Government servant that is possible today. These are
admittedly expensive in terms of people served versus manpower costs.
It is almost dogma with us, however, that the high quality of the inter-
pretation so achieved, is worth all the effort.

I'm sure our local field men will have some comments on this subject!

Dilley:

You're quite right about trips going on at this very moment. In fact,
we have a nature walk with about 50 people going to Swan Lake within
a half-mile of the hotel right now. We schedule six walks of this type
every day in this Park and on seven days a week, longer hikes up to the
 glaciated canyons are provided. We agree that these are the most
rewarding experiences our visitors can get from our program.

Haines:

In Yellowstone, at this very moment, the naturalist at Old Faithful is
addressing five or six hundred people on the story of that one famous
geyser. In addition, there are probably nature walks being taken this
morning to groups of some forty to eighty people at West Thumb on the
shore of Yellowstone Lake; along the plain of our colorful Grand Canyon;
into the steaming hot spring area of Norris Geyser basin; and across
the colorful hot spring terraces at Mammoth. In 1962, a total of
244,140 visitors were provided this personally conducted interpretive
service and we suspect in 1963 the attendance will exceed 250,000. Of
course, in Yellowstone, we also have additional person-to-person service
of this sort. At nearly all the important hydrothermal areas, a uniformed
naturalist is stationed to provide impromptu and short-term interpretive
services to literally thousands of visitors every day.
Alberts:

Although thousands of people have had their understanding of the park increased by nature study walks and guided tours, many people simply don't have time to go. They do get person-to-person service at another important activity--the evening campfire programs. These are not just for campers; many lodge guests find these evening programs particularly interesting. Of course, to give an evening show, you must have certain basic elements--seats for your audience, a place for the speaker to stand and (if the program is to be at all informational and understandable), visual aids, and projection screen and equipment. These installations are scattered throughout the National Park System. We call the smaller ones campfire circles, if they seat 200 people or less. The bigger units, we call amphitheatres. At either, the ranger-naturalist, through skillful use of visual aids and drawing from the depths of his own training and park experience, relates a certain phase of the park story in a situation characterized by relaxation and the euphoria which follows a good dinner under the stars.

Haines:

These activities are quite important to us in Yellowstone where nine evening programs are given every night through the summer season in our amphitheatres and campfire circles. Over 200,000 visitors participated in these shows last year and they required the services of 18 seasonal naturalists per day in order to carry the program forward.

Dilley:

The main center of this work in Grand Teton is at the Colter Bay Amphitheatre, three miles north of us. Every night between five and six hundred people are given the story of Grand Teton National Park from various frames of reference.

Alberts:

We mentioned earlier that "inert" interpretive devices also help carry our program forward. We use a wide assortment of such devices. They generally can be considered either museum exhibits, or roadside-trailside displays. Here at Grand Teton, and in neighboring Yellowstone National Park, you will find examples of nearly every type. At Colter Bay, quite near here, is a typical Visitor Center with colorful and informational museum exhibits relating the park story. Down at headquarters, at Moose, is a series of panels covering the history of Jackson Hole with particular emphasis on the fur trader story.
Haines:

Let me interrupt here to point out that in Yellowstone, we have six Visitor Centers, all of them with a complement of museum exhibits, some of which have been doing yeoman service with minimal maintenance costs for nearly 30 years. We have found, in Yellowstone at least, that a large proportion of park visitors get most of their basic information from these Visitor Center exhibit rooms. They have one great advantage in that the visitor can study them as long as he likes or glance at them as briefly as he cares to. They also are on duty, so to speak, 24 hours a day. We are quite enthused about the effectiveness of museum exhibits in interpretive programs. Our long-range plans for Yellowstone include a massive program of rehabilitation and construction of new exhibits of this sort.

Alberts:

I'm glad you mentioned that, Mr. Haines. Yellowstone in fact is one of the pioneers in the techniques of this type interpretation. As I recall, the museum at Norris is one of the first such structures to be built in the National Park System.

Haines:

Yes, indeed, it was erected in 1930, and still serves a vital visitor need.

Alberts:

We found, however, that many visitors, for one reason or another, can't make even the short stop necessary to visit a park museum. Accordingly, a long-range program of installation of roadside and trailside devices was started several years ago. In your travels through these two National Parks, you'll find good and bad examples of various types of roadside signs, easels, exhibit shelters and other field displays. We haven't yet found the perfect way of doing this. Subject as they are to theft, vandalism and weathering, maintenance of these installations is often a problem. Lack of space requires undue simplification—sometimes we think oversimplification—of a story. Like museum exhibits, however, these structures remain on duty 24 hours a day and are used by far more travelers than any other aspect of our program.

Dilley:

I would like to make special mention of a series of interpretive easels along the Jackson Hole Highway, between here and Moose Headquarters.
These are proving very satisfactory. They are made of routed aluminum, and have resisted both the vandal and the weather pretty well. They are placed at choice overlook points, but in such ways as intrude least into the natural scene.

Haines:

Let me also invite all of you to look at some of ours in Yellowstone. We won't expect you to stop at all of them, however, for we now have 47 roadside devices strategically placed along our 300 miles of road. We don't expect anyone to stop and read every one of these, but we have them at all points of known visitor curiosity. Our observations show that about everyone who visits Yellowstone makes use of at least three of these structures before he leaves the Park.

Alberts:

Well, we hope this rather abridged presentation on this farflung activity has acquainted you with some of its essentials. Since interpretation of area features has been started recently by a number of other bureaus, representatives from which may well be present today, we hope that our quick survey has been somewhat meaningful. Many other aspects with self-guiding trails, for example, where points of interest are explained in a guide leaflet, or which we are presently deeply involved have not even been mentioned. The necessity for research, in all disciplines, is a good example. Or, our increasing reliance on audiovisual equipment to answer basic visitor questions, could be discussed for the balance of the day. Different approaches to interpretation, depending upon subject field, is another topic of keen interest. By that, I mean how we meet the difficulty of developing a high degree of personal interest in a long past geological process, in contrast to how we can exploit the interest visitors have "built in" with respect to historic sites such as Custer Battlefield. Controversial matters, such as the religious fundamentalist who decries our even mentioning the word "evolution," is another lively topic.

But time is of the essence this morning and there are many more weighty topics unrelated to our field yet to be discussed. Accordingly, we will be happy to relinquish our remaining time, and invite questions from the floor on any aspects in which you have overpowering interest.

Before doing so, however, let me express the keen appreciation of all of us involved in this panel, and the rest of us in the National Park Service, for having had the opportunity to discuss this subject with you.