

ASSESSING THE
IMPACT OF
INTERPRETIVE PROGRAMS

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Division of Interpretation and Visitor Services
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by

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FOREWORD

Over the past four months, we have examined different ways that interpreters, interpretive program supervisors, and managers at the Regional and Headquarters level could assess the impact of interpretation on the visitors that it touched.

This document is designed simply to illuminate key issues in the measurement of interpretive program impact, and to suggest a mechanism for resolving them. It is designed to introduce activity monitoring approaches, and by using examples, suggest how they can be applied in the parks.

Our study necessarily had several limitations.

First, we examined only personal services interpretation -- where direct contact between interpreter and visitor was crucial to the effective transmission of the message. Exhibits, audio-visual devices, wayside signs, and the like were not considered in developing our recommendations.

Second, we considered only discrete interpretive activities -- like conducted trips, guided walks, campfires, living history, skill demonstrations, and so forth. Casual visitor contacts, such as those that occur in visitor centers or between a single visitor and a roving interpreter, were not considered in developing our recommendations.

Within these boundaries, we were further constrained by the resources made available to the project. Because of limits on time and funding, we were unable to flesh out our management system, or refine the monitoring techniques we have developed.

Much work remains to be done. Our contribution will have served its purpose if it provides a framework in which interpretive problems can be answered and a foundation on which an effective system can be built.

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SUMMARY OF RECOMMENDATIONS

1. We recommend a two-tiered system of assessing the impact of interpretive programs and activities. This system will subject a severely limited number of parks to full-scale evaluation, and provide all parks with the resources to undertake periodic monitoring. For the purposes of this report, evaluation is defined as tightly controlled scientific study which examines both the operation and the output of interpretive activities and programs. Monitoring studies, in contrast, are more loosely controlled, and exclusively examine activity and program output. Evaluation returns data that is definitive; monitoring returns data that is suggestive.
2. We recommend that an office or officer in the Division of Interpretation/WASO be charged with the design and management of all evaluation activities and with the coordination of park-level monitoring efforts. This will insure comparability of data and easy access to it.
3. We recommend that Division of Interpretation/WASO immediately undertake a project to collect all existing visitor and park use studies, and to aggregate them into a format that will permit their systematic use in future efforts to assess the impact of interpretive activities and programs.
4. We recommend that full-scale evaluation be undertaken through use of formal survey research.
 - a. We recommend that activities and programs be selected for full-scale evaluation on the basis of their comparability to other activities and programs, as well as on their intrinsic quality. Exemplary programs should be chosen for evaluation--so that personnel in other parks can use activities that seem to "work" in situations similar to their own as a benchmark in their monitoring efforts.
 - b. We recommend that surveys be planned in yearly cycles, and that a minimum of six months be allocated for OMB clearance of specific survey instruments.
 - c. We recommend that the Division of Interpretation work closely with other Divisions and Bureaus so that, where possible, questions relating to the impact of interpretive programs can be integrated into survey instruments already in the approval stream. The Division should attempt to incorporate questions relating to the impact of interpretive activities and programs in surveys planned by other Divisions and Bureaus--regardless of where they are being mounted--if their aim, structure, and administration seem to permit it.

5. We recommend that monitoring efforts be mounted in all parks. Responsibility for managing these efforts should rest with the park's chief interpretive officer. Each park should be required to designate certain activities for monitoring, to mount monitoring efforts, to report their findings on a regular basis, and to incorporate them into the interpretive planning process.

a. Although selection of activities for monitoring should be left to the park's chief interpretive officer, we recommend that all monitoring efforts be centrally coordinated so that findings may be compared across parks.

b. We recommend that monitoring efforts be structured so that they return data immediately useful to park interpretive program staff.

c. We recommend that data returned from monitoring efforts be routinely aggregated and forwarded to regional headquarters and WASO, where it can be used, in conjunction with other information, to develop system-wide measures of interpretive program performance.

d. We recommend that the monitoring techniques be designed to utilize sparingly the time and resources of the park interpretive staff charged with mounting them. To ease this burden, monitoring efforts should, wherever possible, either employ electronic data collection devices or should be built into existing interpretive activities.

6. We recommend that a yearly cycle of interpretive program assessment be instituted. This cycle will begin with self-inventories of interpretive activities and programs by all parks; continue with a conference where parks chosen for evaluation will be identified and monitoring techniques will be introduced; and conclude with systematic dissemination of evaluation and monitoring "results" prior to the next cycle's interpretive planning and program inventory phases.

7. We recommend that the first year be devoted to field testing and refining all techniques and materials.

8. We recommend that regional headquarters or the Division of Interpretation/WASO be charged with providing on and off-site technical assistance as required to parks instituting evaluation or monitoring.

"We don't need new ideas. What we need are a reformulation and a more stringent application of some old ideas."

-- National Parks for the Future

INTRODUCTION

Evaluation of interpretive programs is as old as interpretation itself. From the beginning, interpreters and their managers have been concerned with a very simple question: "is what we're doing worth the effort?" Today, the answer is rarely challenged; interpretation is indeed a vital component of the National Park system. It is, everyone agrees, "worth the effort."

But this does not relieve the obligation to continue asking other questions. Growing demands among visitor publics, an increasing role for interpretation in park management, an expanding park system mean that interpretive resources must be even more carefully applied.

- o Programs must be designed that meet visitor expectations and provide them with the kind of experiences they want in the park.
- o Programs must reflect the need to use interpretation as a means of meeting park-wide and Service-wide management objectives.
- o Programs must provide visitors with a foundation on which they can build a deeper understanding and appreciation of our natural and historic resources.

Evaluation is a tool that can insure that these things happen. It can tell us not just how interpretive programs work, but more importantly, whether they work.

Our Charge

In the past, interpretive supervisors have relied on a mixed bag of research, quantitative measures, and informal, intuitive assays of visitor feedback and interpreter performance to "evaluate" their programs. Their energies were almost solely devoted to examining the process of interpretation. At the park level, interpretive supervisors could count heads, or try to get a sense of how participants were reacting to encounters. They could audit the performance of their interpreters and measure it against their own professional judgment of what seemed to "work" and what didn't. They could examine the findings of interpretive research and try to fit them to the day-to-day realities of their park.

What interpretive managers have not often been able to do is determine whether their activities are producing -- for the visitors who come in contact with them -- the outcomes they were intended to produce. Our original charge was to suggest techniques through which the impact of interpretive activities on visitors' knowledge, attitudes, use of the park, and commitment to resource preservation and protection could be measured.

Reformulation .

The ability of interpretive staffs to undertake systematic evaluation of their programs and activities is constrained by a number of factors.

The most evident are limitations on the resources available to them. Scientific evaluation is costly. It requires significant sums of money and manpower -- more than most parks could conceivably allot to it. Moreover, park-level managers of interpretive services are not generally well-versed in the mechanics of survey research. Even though they would be the most apparent beneficiaries of such research, they are often in the least advantageous position to undertake it.

Further constraining the freedom of interpretive supervisors to undertake survey research is the OMB "prohibition" on administration of visitor questionnaires in parks. This is not, of course, a blanket prohibition; OMB has and will continue to approve the administration of certain research instruments in the parks. Yet its existence seems to inhibit park staff. They often cite it as a principal reason why they have not mounted systematic evaluation efforts.

Giving parks the resources and the freedom to undertake evaluation efforts, however, will not assure their implementation, or their utility. Other factors, intrinsic to the way interpretive programs are planned and administered, might stand in the way.

To begin with, there is rarely in parks a consensus on what interpretation can and should be doing. Planning is often decentralized. Front-line interpreters are given considerable freedom to fashion activities within broad frameworks created by their supervisors. Yet rarely do they set objectives in any concrete way. Sometimes the role of interpretation in meeting other management objectives -- in resource protection or maintenance, for example -- is explicitly acknowledged; often it is not.

Without knowing what an activity is supposed to do, it is difficult to determine whether it is working or not. To assess the impact of a program, we therefore need to know for whom it was planned, and for what ends. Yet this kind of information -- this planning data -- is

not readily available in most parks. Consequently, we determined that before we suggested techniques for assessing the impact of interpretive programs, we first had to suggest a mechanism which would permit park interpretive supervisors to systematically characterize the activities and specify their objectives and fit it within a management system that parallels the normal course of interpretive planning and administration.

The System.

The system is essentially a two-tiered structure with responsibilities for program assessment divided between park-level staff and headquarters staff. Its key elements include

- o a series of self-administered inventories through which interpretive programs can be characterized and their objectives specified;
- o a stable of flexible monitoring techniques which can be tailored, using information gleaned from the inventories, to roughly gauge the performance of different interpretive activities in large numbers of parks;
- o limited use of formal evaluation to validate interpretive techniques and to substantiate the general effectiveness of various kinds of interpretation;
- o "performance measures" which illuminate how well interpretation is serving park-level and System-wide management objectives;
- o data gathering techniques which quickly return useful information to park-level program managers, as well as system-wide planners;
- o a data bank which will permit easy retrieval and utilization of information about the effectiveness of interpretive programs, from year to year.

Although we have endeavored to reflect the realities of park management and interpretive program administration in this model system, we have included it in our report primarily for illustrative purposes: to demonstrate one of the possible sequences of activities which must take place before the impact of interpretive activities can be assessed. We recognize that each element of the system will require significant refinement before it can actually be implemented.

1. The Data Bank. The collection, analysis, and recoding of existing park use, visitor characteristics and behavior studies. This information could serve as the foundation for a data bank on the effectiveness of interpretive programs which would grow as new studies are undertaken, and the results of on-going monitoring activities are fed into it.

In addition, impact studies from other, related fields -- such as environmental education, museum programs, and out-of-school community education programs can serve as the nucleus of a library which will aid interpretive program planners in developing more powerful monitoring and evaluation techniques.

2. Self-Inventories. Headquarters will distribute program inventories to all park interpretive staffs. These inventories will characterize the overall park interpretive program and the specific activities out of which the program is built. The inventories are designed to aid both park-level and Headquarters staff. In the parks, the inventories will encourage staff to consider their efforts systematically -- to clearly delineate goals, audience needs, program formats and interpretive objectives. A tangible record of the interpretive season, the inventories will assist park planners in constructing well-rounded, effective programs for future seasons.

Along with other park documents, copies of the inventories will be forwarded to Headquarters where they will provide, for the first time, a clear, system-wide overview of the range and variety of interpretive programs and activities.

The inventories -- as we conceive them -- should draw on data readily available to front-line interpreters and supervisors. They should be easy-to-complete. And, in the first years of use, they should incorporate materials which explain the entire system of program assessment. (See Appendix I) Additional materials might be developed which suggest how materials collected in the inventory process might be directly fed into program planning activities.

3. Matching. On the basis of the information presented in the inventories, Headquarters will identify a small number of parks and programs as sites for systematic evaluation efforts. Programs in remaining parks will be matched to one or more pre-designed monitoring techniques flexible enough to return data on a variety of interpretive activities. Drawing on the characterizations of programs provided in the inventories, Headquarters staff will help tailor techniques to particular parks, and create software that reflects their specific monitoring needs.

4. The Conference. Representatives from each park will attend a conference sponsored by their regional office. At these sessions the system will be explained in greater detail, and its value clearly demonstrated.

Park staff will attend workshops where they will learn how programs are matched with monitoring tools; how to set in place and manage monitoring activities; how to analyze collected data; and how to feed results into their own program planning process.

At the conference, park representatives will also be apprised of those interpretive activities which, because of certain key features, have been selected for in-depth evaluation. (See Appendix III for Sample Conference Agenda.)

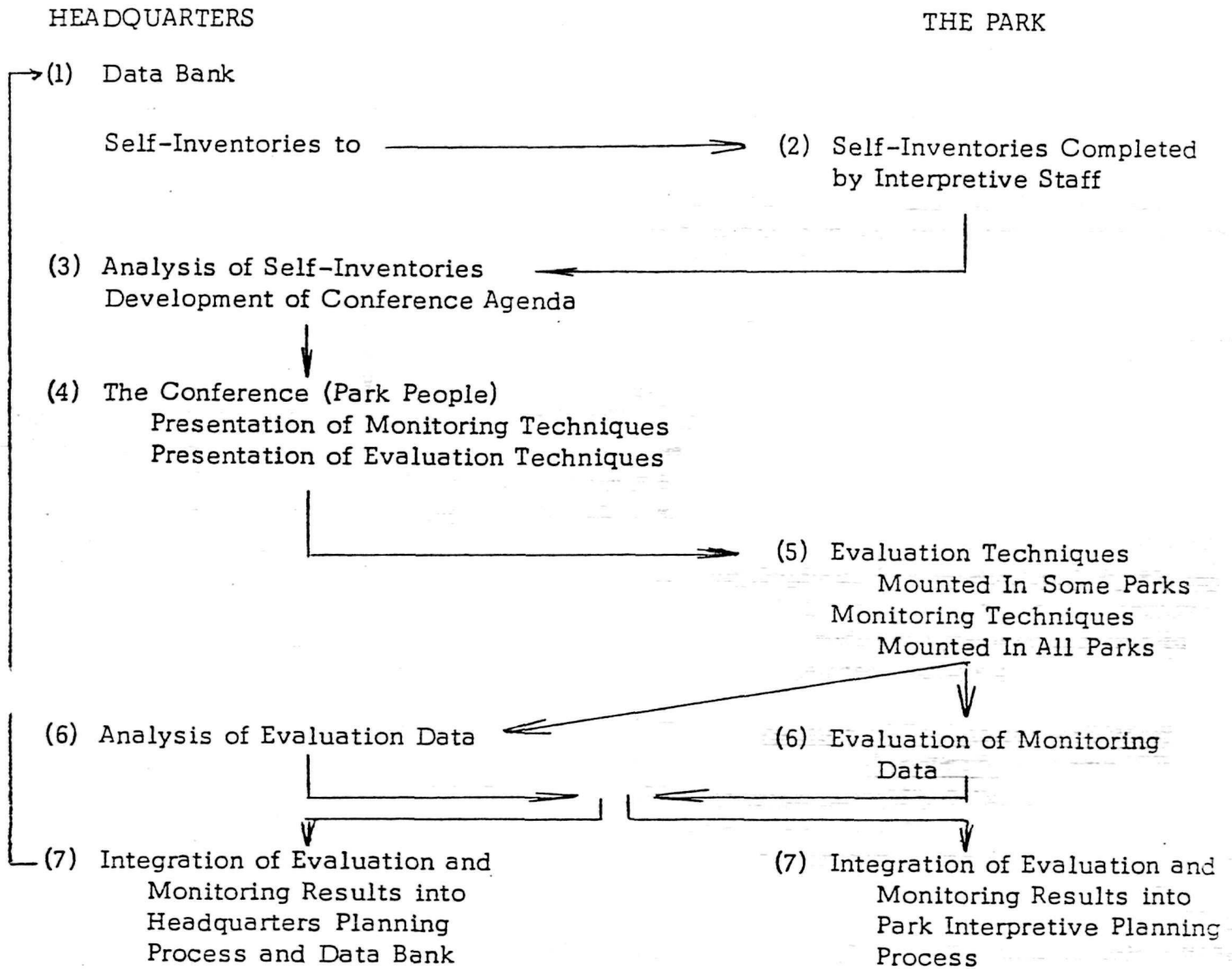
5. Evaluation Techniques In Some Parks; Monitoring Techniques In All Parks. Returning to the parks, interpretive personnel will mount monitoring activities. Regional and Headquarters staff will assist where appropriate.

In selected parks, the impact of model programs and activities on visitors will be measured through in-depth evaluation studies. It is expected that these studies will demand minimal involvement of park-level personnel.

6. Analysis of Evaluation and Monitoring Data. Headquarters will hold responsibility for analysis of the results of the evaluation studies. Park level staff will hold primary responsibility for analysis of monitoring data -- although their efforts will be overseen by their regional offices.

7. Integration of Evaluation and Monitoring Data into Headquarters Data Bank and Park Planning Processes. The evaluation system will mesh with the program planning cycle, so that data collection can take place during the peak program seasons, and so that results are available when the next season's plans are drawn.

The results of the evaluation studies will be used both to aid in system-wide management, and to suggest effective interpretive techniques for consideration by other parks. The results of the monitoring studies will be used to maintain quality control throughout the system, and to improve the impact and effectiveness of each park's interpretive programs and activities.

System Flow.

Evaluation and Monitoring.

We recommend that the Division of Interpretation and Visitor Services adopt two approaches to assessing the impact of interpretive activities: systematic evaluation studies and less rigorous monitoring investigations.

For the purposes of this paper, evaluation studies are defined as those that employ a rigorous, scientific approach. Their purpose is to link process to outcome: in other words, to determine the connection between what happened during the activity and the ways visitors changed through their participation in it.

Scientific evaluation need not --nor can it-- be applied in all parks. Consequently, we suggest that park staff regularly monitor their interpretive activities. Monitoring techniques, designed as practical aids to program planners, require less rigor, staff time and sophistication. Their intent is solely, to measure interpretive activity impact -- to collect data which suggests whether those visitors who passed through interpretive activities know, felt or act any differently than those who do not.

The Interpretive Environment.

Designed to communicate a park's "stories" to visitors, interpretive programs are, to a great extent, specific to the parks in which they operate. Moreover, because of the creative freedom afforded to many interpreters, a single activity will often differ according to the interpreter who gives it.

Despite wide variations in format, content and audience, there is nonetheless some consistency in the interpretive environment. That consistency can be found in the objectives or the intent of interpretive activities. In general terms, interpretive activities are aimed either at affecting what a visitor knows or feels or how he/she behaves in the park. Each interpretive activity is designed to affect participants on one or both of these dimensions, to a greater or lesser extent.

Many interpretive activities are aimed at somewhat altering what a visitor knows or understands, what they believe or feel, or how they perceive the environment around them. The objectives for this kind of interpretation are most often stated in terms of enhancing visitors' "appreciation" of and "satisfaction" with the park experience. The assumption underlying these objectives is that interpretive contact will alter the way visitors subsequently interact with park resources -- what they see, do and understand in the park.

One way of measuring whether this kind of interpretive contact "works" is to ask visitors questions about what they learned, or about their beliefs, feelings, attitudes or perceptions -- and whether these have changes as a result of interpretation. A comparison of the knowledge, attitudes and depth of perceptions between interpretive participants and non-participants will afford a very rough sense of the interpretive activity's effectiveness.

Other interpretive activities are aimed directly at changing the way people behave in parks. Many of these behavior-oriented activities are designed to help achieve visitor or resource protection objectives. Some activities include little more than safety or resource protection information, like orientations to rock climbing or instructions in minimal-impact camping for back-country hikers. More commonly, this kind of information is woven into traditional nature or historic interpretation.

Resource or visitor protection, however, is not the only aim of behavior-oriented interpretive activities. Some activities are designed to encourage the visitor to do more, to go further, to carve out for himself a larger share of the park experience than he otherwise might if he had not been exposed to interpretation. Historic interpretation is often constructed in such a way that it encourages visitors to develop questions on their own, and to seek answers for them in the park. Nature interpretation is often designed, for example, to prepare visitors to explore the park -- to equip them with

the perceptual tools and the self-confidence to leave a structured interpretive situation, and create a deeply personal park experience of their own.

The success of activities like these is measured not by what people take out of the park with them, but by what they do when they are in the park. Hence, to gauge the impact of these behavior-oriented activities, we must find ways of observing what visitors do after exposure to interpretation.

I know that it works'.
Just show me how to prove
it.

-- a park interpreter

EVALUATION

"Proving" that a program works is a responsibility that cannot be easily dismissed. Nor can it be easily discharged. As we define it for the purposes of this document, evaluation -- "proving" that something works -- is a time-consuming, expensive process. It is

The systematic examination of interpretive activities where objectives are specified and performance in meeting these objectives is rigorously measured.

Unraveling why an activity works is a critical part of evaluation. It requires

Looking closely at the relationship between what "goes" into an activity -- its content, format, the characteristics of the people who give it, the nature of the people who attend it -- and what "comes out" of an activity.

Evaluation is concerned with causality. If a program is supposed to lead people to a deeper understanding of the relationship of man to nature, we want to know, what makes it happen? More importantly, when it doesn't happen, we want to know, why? Measuring performance and establishing causality are the touchstones of evaluation. When effective, then, it can become one of the most potent program management tools. It is like a balance sheet; for planners, it is an in-depth, accurate slice of reality -- a foundation on which new activities are based and old ones modified.

The Present.

There are two widely-shared misconceptions about the current state of interpretive program evaluation in the National Park Service.

The first is that no one is doing it. In fact, in each of the parks we examined, interpretive supervisors shared with us at least one study -- based on survey research -- which might be construed as evaluation. They ranged from a survey of park use patterns by teachers and school children in Rock Creek Park to a visitor behavior study in the C & O Canal National Historic Park.

We are personally familiar with perhaps another half-dozen survey-based studies of park use and visitor characteristics.*

The second misconception is that guidelines administered by the Office of Management and Budget prohibit the application of survey research in the parks. This is not the case. OMB has approved, and will continue to approve, a limited number of well-designed, purposeful studies of visitor use and behavior in the parks -- provided they are fit within the context of the Service's overall information needs.**

The studies that we have seen, however, range widely in the quality of their construction, and their utility to program planners.

- o They are rarely fit into the interpretive planning process. They are created to serve academic ends -- often without direct consultation with program planners to whom the information might be useful. Many are undertaken by professors or graduate students. The data they return is too often viewed as a curiosity by park staff -- interesting but of no consequence to the realities of practical interpretation.
- o They infrequently reflect needs of overall park management. Many of these studies are designed to illuminate a single element of the interpretive process. They explore audience characteristics, interpretive methods, program content, etc. Few seem oriented toward linking the outcome of interpretation with park-level management goals or Service-wide objectives of resource preservation and maintenance and visitor protection.
- o They sometimes ignore variables of direct concern to interpretive planners. The most notable problem we discovered was the frequent failure to adequately control for the special nature of interpretive program participants. Surveys which relied on post-tests of knowledge about a particular park theme or interpretive value often failed to distinguish between those differences in scores which could be explained by exposure to interpretation, and those differences which could be explained by prior knowledge or predispositions of interpretive program participants.

* The most notable of these is the extensive study by Robert G. Lee, The Management of Human Components in the Yosemite National Park Ecosystem, 1975.

** Conversations with the Park Service personnel responsible for liaison with OMB on matters of survey research confirm this statement.

- o Their findings are not widely shared. The results of surveys are not widely circulated at the park level -- to supervisors and front-line interpreters. There is no central record of what kinds of surveys are being administered -- and for what purposes. Data is not stored together so that findings can be compared and cross-validated and distributed to interpreters or supervisors throughout the system for use in planning new programs and improving old ones.
- o They are sometimes redundant. Some issues are addressed in all studies. As one Headquarters staff person put it, "we have been asking the same questions for years."

In the Future.

Systematic evaluation founded on survey research can serve a number of important ends. Its most obvious use is in providing precise, documented and reliable data on whether interpretive programs are working to achieve the goals set for them. When this kind of information is carefully analyzed, it can provide program planners not only with clear measures of performance; it can also suggest why programs work and why not. Evaluation -- because of its rigor -- can, therefore, not only be used to justify growth in interpretive services; it can illuminate the directions in which that growth might be most fruitfully pointed.

This is the second use to which good evaluation data can be put. By validating specific interpretive techniques in just a few parks, it provides all other parks with a benchmark against which they can measure the effectiveness of their own activities. If certain approaches to historic interpretation, for example, can be proven to work under specified circumstances, other parks with demonstrably similar activities can legitimately claim that their's work too -- without enduring the expense or burden of a full-scale evaluation project.

Evaluation, finally, can serve as the crucible for innovation in interpretation. Under the carefully controlled circumstances which characterize systematic evaluation, new interpretive techniques can be introduced and tested, refined and applied in the field. By drawing careful links between program process and program performance, evaluation helps advance the state of the art in interpretation; by sharing results, the Service exposes its interpreters not only to what is new, but what can work.

Directions

To fully exploit the value of systematic evaluation and to insure that the information it returns is effectively applied, we recommend that the Division of Interpretation

- o Establish an office or designate an officer to oversee the evaluation and monitoring of interpretive programs. By serving as the focal point for all efforts to gauge the performance of interpretive programs, this office can insure that information is collected and shared with those parks and Divisions which can utilize it. Equally important, it can coordinate the development of survey instruments and the selection of parks where they should be applied. This will help reduce redundancy, insure utility, concentrate timely evaluative resources where they can do the most good.
- o Undertake systematic evaluation in a very limited number of parks to serve specific ends. Because evaluation is costly and time-consuming, and because of OMB restrictions it is unlikely that NPS will be able to mount systematic evaluation efforts in all or many of its parks. Evaluation should be seen as a tool that is applied to serve System-wide, rather than park-level ends. Parks and interpretive programs where evaluation is undertaken should be carefully chosen, therefore, for what they can reveal about interpretation in general, the utility of interpretation in serving management goals, and the power of various interpretive techniques. Parks and program chosen for evaluation should include the unusual and the typical. Studying programs with unusual interpretive objectives and techniques will foster innovation. Selecting programs which are representative of a wide range of other parks and interpretive activities will enable WASO to provide field supervisors with information they can use to validate their own activities. Programs used for these "benchmark" studies should be carefully characterized, so that supervisors in other parks can match their programs to the models.
- o Emphasize survey research in its evaluation efforts. Because of its rigor, its concentration on linking ends to means, its depth, and the "provability" of its findings, survey research based on visitor questionnaires should serve as the primary tool for evaluation efforts.
- o Delegate responsibility for mounting systematic evaluation efforts to Headquarters staff, or to outside contractors. Few parks have the staff or the expertise to mount formal survey research. Teams drawn from Regional or national headquarters could be charged with

mounting these activities and analyzing their results, under the supervision of the WASO evaluation and program monitoring office. Independent contractors could also be utilized. In either case, the specifications for all evaluation activities should be developed in close consultation with park staff.

- o Plan its program evaluation and monitoring activities on a yearly basis. Since evaluation is intended to serve System-wide needs, sufficient time must be provided to identify those needs and to fit specific evaluation projects to them. The yearly interpretive program cycle can serve as a framework. Parks suitable for specific evaluation projects should be identified -- using the Inventories and other data -- almost immediately after the beginning of the cycle. Survey instruments should be developed and up to six months allowed for their clearance by OMB. Data can be analyzed and disseminated during the latter months of the cycle.
- o Coordinate its survey research with other Divisions and Bureaus in the Park. Other Divisions and Bureaus already administer surveys in a number of parks to serve a variety of purposes. The questionnaires they use might be flexible enough to accommodate additional questions designed to illuminate visitor attitudes or park-use behavior of interest to the Division of Interpretation. The office(r) charged with evaluation and monitoring should explore cooperative surveys with the Office of Management Consulting. This could result in significant cost-saving and permit the most efficient use of the survey opportunities provided by OMB to NPS.
- o Explore other methods for gathering rigorous evaluation data on the performance of interpretive activities and programs. Questionnaires need not be the only technique used in systematic evaluation. Other instruments which return the same kind of data could be designed and tested. One example might be a "diary" or "activity book" distributed to visitors as they enter the park. These books would orient visitors to park resources, and suggest ways that they can structure their visit. Questions or activities could be incorporated into the books that would elicit what visitors actually do or learn in the park. They would be encouraged to "fill in" answers to the questions, complete the activities, and return the book as they leave the park. Completed diaries and activity books could be analyzed to assess how well visitor expectations were met, what changes in visitor knowledge or attitude were effected by exposure to interpretation, and how use of the park and behavior in the park were shaped by interpretive activities. Demographic information should, of course, be requested in the diaries.

Other information-gathering tools already in place can be slightly modified to accommodate the needs of the Division of Interpretation -- particularly in exploring the connection between interpretation and visitor protection and safety. Case Incident Reports and Accident and Property Damage Reports, for example, could easily be amended to include questions about visitors' prior exposure to interpretation. Adding this information would permit statistical examination of the role of interpretation in limiting unsafe or resource-damaging behavior.

Evaluation techniques gleaned from experience in other fields -- like museum research, adult out-of-school education, community outreach and attitude change, etc. -- should be considered for their applicability to the park context.

MONITORING

Within the system that we have described, monitoring differs from systematic evaluation on a number of critical dimensions.

Adaptability. The process of evaluation is lengthy. By the time the survey is designed, applied in the field, results collected and data analyzed, the activity under scrutiny may have changed dramatically. Evaluation, some researchers claim, "freezes" the program in time; you may end up delivering results about a program that no longer exists. (Taylor, 1976). The monitoring techniques listed below are more adaptable. Not only can they return useful data almost immediately after application. Their software -- the questions they ask and the answers they are supposed to provide -- can be easily and economically changed.

Flexibility. Evaluation instruments are designed to provide answers to very specific questions. They are often tailored to a single park, and fit to a particular activity. The monitoring techniques we have devised are designed for easy use in a variety of interpretive contexts. They can be readily programmed to compare in rough terms the impact of knowledge-, awareness- and behaviour-oriented interpretation.

Rigor. Because the methods used for collecting and analyzing information are not so tightly controlled as those employed in systematic evaluation, simple monitoring will not permit definitive statements about program impact. However, within the limits imposed by their looser construction, monitoring activities will permit strongly suggestive statements and comparative judgments about the power of interpretive activities to shape visitor knowledge, attitudes, awareness or behavior in the park setting. They can be focussed to illuminate the links between interpretation and other park management objectives. We see these monitoring techniques as management, not research tools.

Control. The average visitor to the park, and the average participant in interpretive activities may differ in important ways. Persons already committed to protection of natural resources may be overrepresented among audiences for nature interpretation. Persons with a strong interest in history or in a particular event may be strongly attracted to historic interpretation. Each may bring as much prior knowledge to an interpretive activity as they will "receive" from it. When roughly measuring the impact of interpretive activities, planners can combine monitoring techniques with visitor surveys and evaluation data that examines the characteristics of interpretive program participants. This will enable them to control variables like the prior knowledge or predispositions of activity participants.

A Caution. Systematic evaluation and simpler, less rigorous monitoring techniques share one important characteristic. The quality of the data they return is directly related to the care with which they are implemented. Before the techniques we suggest here are used, they should be carefully field-tested, and clear protocols for their administration developed.* Even then, their utility will depend on how closely park staffs follow these protocols.

* Researchers attempting to introduce innovative curricula have found that success is determined as much (or more) by the care with which teachers use them as by intrinsic features of the curricula.

APPLICATION OF MONITORING TECHNIQUES

Interpretive Objectives

Monitoring Techniques

	Quizboard	Maps	Joining/Requesting	Test Behavior	Audience at Risk
<u>I. Knowledge, Attitude or Perceptions</u>					
o Knowledge of Park Themes and Resources	X	X			X
o Awareness of Safety Behavior	X				
o Perceptions of Nature	X			X	
o Commitment to Values of Specific Park or to Mission of NPS			X	X	
o Commitment to Preservation and Protection of Park Resources			X	X	
<u>II. Behavior</u>					
o Incidence of Safe Behavior				X	X
o Incidence of Environmentally Aware Behavior				X	

do interpretive activities help visitors learn more about the park -- or about the Park Service and its mission?...

The Recording Quizboard

The recording quizboard, long a tool used in museum exhibit evaluation, was first applied to the park interpretive context by Alan Wagar (1972). In its most common form, it consists of machinery which automatically presents a series of questions to the visitor, offers them a choice of answers, and records their answers for later study. In this country, they have been most often applied to test how much participants learn through exposure to an exhibit or some other educational experience.

Quizboards themselves are generally unobtrusive. They can (and have been) built into exhibits or educational activities so that visitors enjoy "playing" with them; if well constructed, they can reinforce what visitors have learned in the interpretive process. Many park interpretive exhibits incorporate quizboards for precisely this reason.

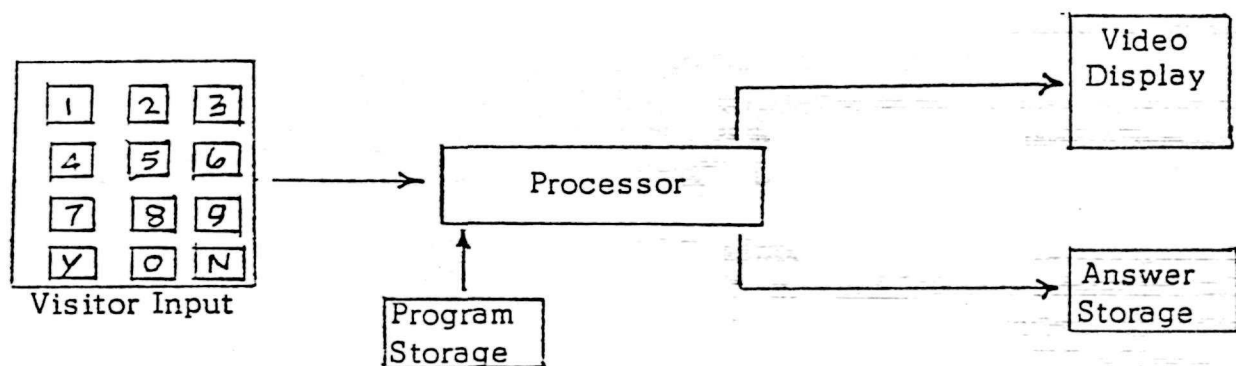
Their use as evaluative -- rather than educational -- tools has been much more limited. Part of the reason is mechanical: finding an appropriate way to record visitor responses that is economical and relatively maintenance-free. Another reason is that quizboards, as they are traditionally conceived, do not tell you who scored what. Put another way, a simple recording quizboard will not tell you whether people who came into contact with interpretive programs scored any higher -- or lower or differently -- than people who had no interpretive contacts.

Interpretive activities, however, are founded on the premise that people who are exposed to them will know more, feel different, or perceive differently than people who are not exposed to them. Thus, to measure their effectiveness in reaching these goals, we must find a way to measure the differences in knowledge, attitudes or perceptions, between participants and non-participants, after exposure to the activity.

The quizboard system we describe below is designed to permit park staff to do just that. It will enable program planners to roughly differentiate respondents on any of a variety of demographic or prior park use variables.

Hardware.

We recommend that NPS produce its own electronic recording quizboard using off-the-shelf microprocessor components.* These "microcomputers" are relatively inexpensive and easy to maintain. The entire system would consist of a microprocessor which would differentiate visitors according to information they feed into the system. This information could be fed in through a variety of input devices--typewriters or touchtone telephone keyboards, for example. Instructions on "playing" the quizboard and the questions themselves could be displayed on an inexpensive video monitor. The program for the system, and the "quiz" questions could be stored on an inexpensive audio cassette recorder, while "answers" could be stored on another.



Software.

The quiz should be presented to the visitor as a "game". The system itself might be decorated in the fashion of amusement arcade games. Token "rewards" -- redeemable discount coupons toward an NPS Season Pass,^{NO} for example--might be offered to high scorers as an incentive to "play" the game.**The flow of the "quiz" and the computer responses to visitor answers should be designed to encourage completion of the "game" as well as to facilitate learning by the "player". The quiz should be seen not only as an evaluative tool--but as an educational tool as well.

Software for all quizboards should be developed by WASO, on the basis of program inventories and in close consultation with park staff.

* Russ McDonald of ATARI CORPORATION confirmed the feasibility of this application.

**Tokens could, of course, be dispensed to anyone who completed the "quiz" regardless of their "score".

Introductory Questions.

Answers to these questions will be used to differentiate interpretive program participants from those players who were not exposed to interpretation. Players could be further divided according to the extent of their interpretive contacts, the specific activities they attended, or on demographic criteria. The questions might also include queries about personal characteristics, nature of the group with which the player visited the park, or the reasons the player chose to visit the park.

Which questions are asked--and consequently the categories into which players can be separated for comparative analyses--will depend on the intent of the monitoring exercise and the objectives of the interpretive program under study.* (See Appendix IV for a list of sample Introductory Questions and a description of one system for using them to differentiate players.)

Differentiating Visitors Without Introductory Questions

Despite the fact that these introductory questions do not constitute a survey, but rather an unrecorded preamble to a "game" that is integrated into a park's regular interpretive program, their use may be impractical or prohibited. In this case, a large display panel adjacent to the quizboard can be used to provide instructions on how visitors can "play" the game. These instructions could also enable the player to select a code number which--when punched into the quizboard--would permit his answers to test questions to be "filed" in the appropriate category for later, comparative analyses.

Audio Visual Aids.

Sometimes test questions can be better asked (and understood) if the respondent is given a picture to look at. (Shettle, 1969; 1977) Audio-visual aids can be particularly helpful when one is testing respondents' recollection of objects or places, or their perceptions, or asking them to identify safe or resource protective behaviors. These a/v aids can be easily added on to the quizboard program by displaying them on panels adjacent to the video display unit. Players can be directed to examine them through instructions presented, along with the questions, on the video display unit.

* The park's Inventory of Interpretive Programs, John Hanna's data, and Don Field's Interpretive Activity Observation cards could be valuable sources for these questions. Analogues might be found in the survey instruments of other researchers. (Field, 1976; Lee, 1975; Shettle, 1969; Borun, 1976)

Applications.

Recording quizboards can be used to measure differences in knowledge, perception and attitude between interpretive activity participants and non-participants, or between those who attended activity "X" and those that participated in activity "Y". Three examples of possible applications are presented below.

1. Application: History Cognition/Harpers Ferry National Park

Purpose: To test whether those participating in a structured interpretive activity know more about the park's key historic events than those who came in contact with less structured types of interpretation.

Introductory Questions: Could separate players into three groups: one representing those who were exposed to no interpretive activities; a second for those who attended various living history exhibits; and a third for those who went on the guided tour, "Myths and Legends of Harpers Ferry".*

Test Questions: Questions should determine level of knowledge about the way the Harpers Ferry's physical location affected its development.

2. Application: Perceptions of Nature/Shenandoah National Park

Purpose: To test whether interpretive activity participants are more sensitive to the variety and complexity of a park's ecology than non-participants.

Introductory Questions: Could separate players into two groups: one representing those who attended one of the daily nature walks; and those who attended no activities.

* These are not exclusive categories. Answers could be coded, however, to set up a separate category for players who, for example, attended the walk and visited the living history sites.

Test

Questions: Displayed on an adjacent panel are a series of pictures of Big Meadow taken at various times of the day. Players are asked a series of questions to determine their understanding of the relationships between flora, fauna and man in a natural setting. We want to know what they "see" when they look at a flower, a "weed", a rodent, insects, poison ivy...

3. Application: Visitor Protection/Great Falls, Maryland

Purpose: To test whether interpretive activity participants are more inclined to exhibit safe behavior than non-participants.

Hypothesis: If people are aware of potentially dangerous behavior, they will tend to avoid it.

Introductory

Questions: Could separate players into three groups: those who attended a personal service interpretive activity; those who attended no activity but did talk to park personnel; and those who had no contact with park personnel.

Test

Questions: Displayed on an adjacent screen are a series of pictures of various sites in the park. Different types of visitors are shown engaging in a range of activity: for example, a family picnicking on the rocks next to the river; a group of senior citizens walking on the tow path; a number of teenagers sunbathing on the rocks in the river. Players are asked a series of questions that determine their ability to identify potential danger to the group portrayed.

Analyzing Results.

Quizboard results can be analyzed in two ways: at the park level and at headquarters. Quizboards should be designed so that, by entering a special code, park personnel can "read out" the data files for each test question. This should give them an opportunity to compare how people with different park experiences responded to same questions. The difference in responses, of course, will enable them to judge how exposure to different interpretive experiences affects peoples' knowledge of, attitudes toward, or perceptions in the park.

Cassettes on which data are stored should be periodically returned to Headquarters for more systematic analysis and for comparison to data returned from other parks. Print-outs of data and comments should be returned to each park for use in interpretive planning.

do our interpretive activities encourage visitors to do more in the park on their own?...

MAPS

Some activities are aimed at broadening the horizons of park visitors. They are designed to show visitors that they can find satisfying experiences at a variety of sites in the park. From a management perspective, encouraging visitors to range more widely makes some sense. In some parks, visitors "bunch up" -- placing a strain on some sites while others are underutilized. Interpretation, it is argued, is one tool that can help solve this management problem -- particularly when it is used to orient visitors to park resources.

To determine whether interpretive activities serve this end, we must learn whether people who have had a significant interpretive experience go to different places in the park than people who haven't.

Assumption.

1. We assume that people who are exposed to interpretive activities will tend to visit a wider variety of sites in the park, than those who aren't, particularly when the activities include "orienting" information.

A report by Sidney Starobin (undated) suggests that exposure to certain activities-- in this case a slide-tape program--indeed affected visitor use of certain park resources. He found, for example, that people who viewed a slide program on the park were almost twice as likely to visit a waterfall or take a foot trail, as people who did not view the orientation program.

Administration.

One relatively inexpensive technique for tracking visitors through the park would be to place large maps of the park at various exit stations. These maps would detail the major sites, trails, key features and locales in the park. A large sign, over the map, would invite visitors to insert pins on the locations they visited--on their way out of the park.*

* On their way into the park, visitors might be given a pocket-sized version of the same map, as an activity guide and orientation tool. Copy on the map might ask the visitor to stop at the exit station on their way out of the park. In cases where large display maps are used to "record" data, the small maps could serve as memory aids. In cases where it is not feasible to erect display maps, visitors could be encouraged to mark down--on the small maps--what they had visited and to return them as they leave the park. The maps could include a self-mailer so that visitors could mail them back postage-free.

The pins themselves would be color-coded--red, for example, for those who had attended an interpretive activity, yellow for those who had not. Instructions on how visitors should select the appropriate color pins would be offered on a side panel.

Some parks might find it appropriate to station a volunteer at each map to assist visitors, and to encourage them to complete the entire map. He should be carefully briefed on the nature of the "experiment" and its intent so that he can explain to visitors. Other parks might offer an "inducement" to people as a means of encouraging them to complete the map exercise. This "inducement" could consist, for example, of a free subscription to the monthly calendar of Park or regional events. As a general rule, these "inducements" should be items that the Park would normally provide on request, free of charge.

Applications.

HARPERS FERRY Purpose. To determine whether those visitors who attended interpretive activities visited more park sites than those who did not.

Administration. On leaving the park, visitors who attended "Myths and Legends of Harpers Ferry" are asked to insert red pins in the map; those that attended the "Guns of Harpers Ferry" are asked to insert yellow pins. At the end of the day, the number, color and location of pins are recorded on a quizboard.*

SHENANDOAH Purpose. To determine whether interpretive program participants who stayed overnight visited more park sites and engaged in a wider range of activities than overnight visitors who attended no activities, or day-use visitors.

Administration. As they leave the park, day-use visitors would be asked to use yellow pins to mark where they had visited. Overnight visitors (non-participants) would be asked to use black pins. Overnight visitors (participants) would be asked to use blue pins.

* Because of their demonstrated propensity to "participate" in park-related activities, interpretive program participants may be more likely to stop and fill in the map. This overrepresentation of people who have been exposed to interpretation is, in itself, revealing. It may suggest that exposure to interpretation is indeed linked with a desire to "help" the park. In any event, it need not pollute the findings from the map exercise. We are interested not in absolute numbers from each category (each color pin), but in proportions and distribution.

In addition, on the reverse side of or adjacent to the map, a list of park activities would be presented. Visitors would be asked to place appropriately colored pins next to activities in which they engaged.

Recording and Analyzing Data.

At the end of each day, the number, color and location of pins should be recorded on a work sheet which indicates precisely what each color represents. At regular intervals, these daily counts should be summed and compared to determine how exposure to interpretive activities affected where people went in the park. Monthly summaries could be forwarded to Headquarters.

The reliability of this information can be roughly checked by comparing it to figures derived from ordinary visitor counts at various sites.

Some parks might find it useful to compare "results" from maps at various exits stations. Others might want to photograph the maps with pins in place, and then "transfer" the data to a smaller paper map. If this is done periodically, interesting and potentially informative variations might be observed.

do interpretive activities
lead participants to a
stronger commitment
to resource protection?...

Joining and Requesting

Interpretation is often regarded as one of the tools by which park managers can achieve important management objectives. Its use in promoting environmentally aware attitudes and behavior among visitors is well understood by interpretive planners and field interpreters. Promoting these attitudes and behaviors will contribute, the argument goes, to reduced visitor and resource protection burdens. In addition, many observers feel that interpretation can be useful in developing positive attitudes among visitors toward the general notion of protecting Park resources, and to the mission of the Service itself. This double-edged commitment is valuable, they say, in opening links to the public NPS is charged with serving, and with building reservoirs of citizen support for historic and natural preservation.

Using full-scale evaluation research or specially-programmed quizboards, one can roughly measure whether specific interpretive activities achieve these aims. But too often, the link between what people say they feel, and what they really feel or ultimately do is a tenuous one. Hence, we suggest here a technique which will give park staff an opportunity to gauge attitudes and commitment of visitors to resource preservation and the NPS mission--by permitting visitors to actually manifest these feelings in controlled circumstances.

One tangible measure of commitment to resource preservation or positive attitude toward the Park (and NPS) is one's willingness to join an organization associated with the Park (or NPS), or to ask for more information about its mission, and how one might help it accomplish a specific "task". (Shettle, 1977)

Assumptions.

1. We assume that people who enjoy substantive interpretive contacts (guided nature walks, living history demonstrations, stationary talks, etc.) will be more prone to engage in this "joining or requesting" behavior than those who have had no interpretive contacts. "Joining or requesting" in this instance reflects how interpretation can deepen a visitor's park experience, and subtly shape his subsequent attitude toward the Park and commitment to its appropriate use and preservation.

2. We assume that those people who attend interpretive activities where resource preservation is discussed or the importance of the Park to everyday life is explained, or the mission of the Service is demonstrated, will be more prone to engage in this "joining or requesting" behavior--if the program "connects".

Field tests in Harper's Ferry National Historic Park and the Palisades District of the C & O Canal National Historic Park tend to roughly confirm both assumptions. On the Canal, interpretive program participants were almost twice as likely to request a subscription to a monthly publication which described other activities in NCR parks, than people who were not involved in interpretive activities. At Harpers Ferry, a much less conclusive test suggested that interpretive program participants were somewhat more likely to "help" in an experiment "designed to make Harpers Ferry a more satisfying place to visit".*

Administration.

This is a relatively inexpensive and uncomplicated monitoring technique. It requires, as a pre-requisite, some association or organization linked to the park that visitors might join, or some publication or document that they might request.

The cooperating association should be clearly identified with the park's or NPS' mission, and committed to its preservation and appropriate use. "Joining", then, can suggest positive commitment toward these goals.

What visitors can "request" will vary according to what publications are available, and what planners want to monitor. The choice offered should reflect the interest of the interpretive activity under study, and the aims of the monitoring effort.

Application.

The technique can be applied in the following manner.

1. Cards are prepared which invite the visitor to "join" an organization or "request" a specific document, or information. The cards should be color-coded so that they can be easily separated into two batches.
2. One batch should be distributed randomly to visitors to the park. The number of cards distributed should be noted.

* Problems of administration and an abnormally low rate of attendance at interpretive activities rendered this test statistically invalid. The results, however, tended to fall in the direction anticipated.

3. The second batch should be distributed to interpretive activity participants at the conclusion of the activities being examined. The interpreter should hand them out without comment. The number of cards distributed should be noted.
4. Continue the procedure until at least 100 cards in each batch have been distributed.*
5. Return rates from each group should be tallied and the proportion of returned cards to distributed cards compared.
6. Fill visitor requests.

Planners should note that the more one asks a visitor to do, or the more money one asks him to spend, the less likely he is to be motivated to act. In all cases, therefore, planners should strive to make it as easy (and cheap) as possible for the visitor to "return" the card. "Requesting" behavior that requires a long walk to the visitor center, for example, or "joining" behavior that involves a stiff membership fee should be avoided. And, of course, both general visitors and interpretive program participants should be provided with identical opportunities and instructions for "joining" or "requesting".

Visitors might be asked, for example, to

- o fill out a subscription card to the National Parks Association magazine, or the newsletter of a cooperating association;
- o drop a card at the visitor center requesting more information about how citizens can help solve specific resource preservation problems in that park;
- o mail a pre-stamped card to the Park requesting a leaflet on how to teach children to be more environmentally aware;
- o mail an unstamped request form to Park Headquarters requesting a monthly calendar of activities in the Park.

Example: Resource Maintenance. To test whether interpretive activity participants exhibit more of a commitment to maintaining the park's resources than non-participants.

Execution: A leaflet is prepared which explains how undue concentration of visitors at particular campsites is creating severe maintenance problems for Shenandoah National Park. Recipients are invited to fill out a blank, drop the leaflet in a collection box at their campsite, so that they can receive a brochure explaining what they can do to help solve this problem. More participants should respond than non-participants.

* This number could vary depending on the kinds of activities being monitored and the type of information sought

Example: Preservation. To test whether interpretive activity participants exhibit more of a commitment to preserving the park's resources than non-participants.

Execution: A leaflet is prepared which explains the nature of archeological excavations being undertaken at Harpers Ferry. Recipients are invited to fill out leaflet, drop it in a collection box near the site, so that they can be informed of efforts they--as citizens--might make to help preserve this, and other historic resources.

Alternately, if permitted, the leaflet might ask the recipient for a small (\$.25 or less) contribution to support the activities of the Cooperating Association linked to the park, or involved in "telling the story" of the dig. In this case, volunteers from the Association might distribute the leaflets.

More participants should respond than non-participants.

Example: Attitudes toward Park or NPS. To test whether interpretive activity participants exhibit more interest in what is happening in the Park, and the mission of the National Park Service, than non-participants.

Execution: A leaflet is prepared which explains the role of citizens in planning activities in Rock Creek Park. Opportunities for direct participation in cooperating groups or advisory bodies, or in "public hearings" on the future of the park are described. Recipients can return the leaflet for more information on how they can become "involved" in setting directions for the Park.

Alternately, they could be offered a subscription to a publication that will keep them informed about what is happening in the Park.

More participants should respond than non-participants.

Recording and Analyzing Data.

Since we are comparing simple return rates of cards coded along two (possibly three) dimensions, data can be easily tallied by clerical staff in the Parks.

Wherever possible, we recommend that all cards invite the respondent to enter his name and address, including zip code. If that is not possible, the card should at least request his zip code.

Once fed into a computer, addresses on a mailing list can be subjected to an analysis of zip codes which--when correlated with census tract data--can return valuable information on the demographics of visitors versus interpretive activity participants, and their place of residence.

do interpretive activities
lead participants to act
differently in the Park?...

Observing "Test" Behaviors

In the preceding section, we discussed a technique which permitted park staff to examine concrete manifestations of attitudes or feelings. In this section, we go one step further. We offer some suggestions on how behavior itself can be observed and compared--in controlled test situations. These techniques depend on providing visitors with clear opportunities to display "test" behavior analogous to the kind of behavior that interpretation is intended to promote and then comparing "results" between general visitors and activity participants.

General Assumptions.

1. We assume that people who are exposed to interpretive activities that teach certain behaviors, inculcate certain attitudes, or demonstrate how such attitudes and behaviors fit within a positive park experience, will subsequently be more disposed to display these behaviors than those who have not been touched by interpretive programming.
2. We assume that people who display test behaviors in controlled, observed situations will be more likely to behave appropriately in the park itself.

Application: Resource Protection.

A special interpretive activity which offers visitors an opportunity to explore some aspect of the park--while at the same time helping to preserve or maintain the resource in question--is added to the program schedule. In all announcements and bulletins, the "preservation" or "maintenance" aspect of the activity is clearly stated.

A "control" interpretive activity--similar except that it does not feature the "test" behavior--is offered at or about the same time, and announced along with the first through all the same media.

Example: Rangers at Shenandoah could announce a special overland hike to a particularly attractive waterfall. During the "test" activity, the interpreter will lead the group in undertaking certain "trail maintenance" activities.

Example: Interpreters at Great Falls could lead a walk along the riverbank to explore transitional flora and fauna. Announcements of the "test" walk would state explicitly that, during the walk, visitors will help the rangers sample water quality at various points along the river.

Many combinations of interpretation and "test" behaviors are possible. It is important, however, to find "test" behaviors that are not intrinsically boring or repugnant.

Both the "test" and the "control" activities should be clearly announced at selected interpretive activities on the day(s) prior. Leaflets may be used to help promote attendance at either of the activities.* In no case, however, should attendance at the "test" activity--as opposed to the "control" activity--be sold.

Once the "control" and "test" activities have begun, the interpreter leading them should count the number of attendees and note it on an observation card. He should then ask members of the group informally how they learned about the activity.

According to the assumptions stated above we would expect to find a larger proportion of interpretive program participants among those who came to the "test" activity than we would among those who came to the "control" activity. These proportions should be later noted on an observation card, along with comments about how each activity was advertised--including the titles and contents of the interpretive activities at which they were mentioned.

Application: Environmental Awareness.

In this application, "test" behaviors are built directly into various interpretive activities being examined. The "test" behaviors themselves would involve placing the activity participants in a position where they can choose between "environmentally aware" ways of accomplishing a task, and others that reflect a lower degree of environmental awareness. At the simplest level, the task might involve whether or not, when the interpreter asks participants to examine a flower, they pick it or not. It might involve asking participants to move to another location, and then observe whether they cross off the trail and shortcut or not. It might involve asking participants to collect wood so that the interpreter can show how a rough shelter is built--and then observing whether they bring back live wood or not. It might involve observing how participants clean up a campfire site after lunch, or whether--when asked what sound is "out of place"--they identify the automobile sounds from the adjacent road.

* If leaflets are used, an equivalent number could be distributed at the gate to control for the higher "pulling" power of this kind of interpretive advertising.

In most cases, interpreters should strive to incorporate into their activities "test" behaviors which demonstrate the kind of impact the activity is designed to generate. They should also be suitable to the locale, the activity audience, and do no real damage to the environment--should the participant "fail".*

The key to applying this technique is, first, to find the right "test" behavior for a given activity--and then to vary when, during the activity, the "test" is given.

Administering the "test" before an activity begins will permit the interpreter to observe how many people will exhibit appropriate behavior without exposure to interpretation. The interpreter should note these observations on a card, along with the total number of people in the group. Then the proportion of persons exhibiting the appropriate behavior should be calculated, and noted.

When the "test" has been administered often enough to generate a meaningful average proportion of persons who display appropriate behavior without exposure to interpretation, the interpreter should begin administering it to program participants as the last element in the activity. This will permit him to observe the proportion of visitors who display appropriate behavior -- after exposure to the activity.

According to the assumptions we list above, we would expect that the proportions observed after the activity would be higher than those observed prior to it.

Data should be collected for comparative analysis between activities, and for long-term analysis of the impact of single activities. Some parks may want to modify the Field Observation Guides developed by the Denver Service Center, or those tested in Mount Rainer National Park, to accommodate these additional observations. This will permit rough demographic analysis of those who pass the behavior "test" and those who don't. In any event, observation cards should include space for recording information about the activity into which the "test" behavior was inserted.

Periodic reports indicating the differences in pre- and post-activity "scores" on the behavior "tests" should be sent to Headquarters.

Application: Ranging.

Nature-oriented interpreters often claim that their goal is to encourage visitors to explore the park on their own--to range beyond the boundaries which normally

* The OBIS programmed instruction package may suggest appropriate "test" behaviors for environmentally-oriented interpretive activities. Nonetheless, trial and error by front-line interpreters themselves will be necessary to find the right fit between "test" behavior, activity and audience.

might confine them had they not been exposed to interpretation, or accompanied by an interpreter. This technique is designed to permit assessment of how well interpretive activities achieve that goal.

Something of particular historic or scenic or ecological interest which is a reasonable distance from the interpretive site--and which is not commonly visited by the average park visitor--is identified. Going to this site at the interpreter's invitation will constitute a positive response to the behavior "test".

As the activity participants gather, the interpreter selects one visitor and privately asks him if he will unobtrusively observe how many from the group actually visit the "test" site. The interpreter might give this confederate an observation card on which to record his count and ask him to return the card to the Visitor Center. The interpreter then begins the activity and conducts it according to his normal routine.

Some time before the activity is scheduled to conclude, the interpreter announces that he must leave to "take care of some business at the Visitor's Center". Rather than cut the activity short, though, he suggests that the group visit the "test" site in the remainder of the activity's allotted time.

According to the assumptions stated above, a successful interpretive contact would result in a significant proportion of participants choosing to explore the "test" site on their own. Since externals (like weather, the nature of the group, the intrinsic attracting power of the "test" site, etc.) can easily confound the results of this technique, it should be carefully applied.

is our safety
message reaching
those who need
to hear it?...

Observing Interpretive Audiences: Safety

If reducing accident rates is one objective of park management, we may find it useful to determine how exposure to interpretive activities actually affects those rates. Unfortunately, the already low rate of accidents would make it statistically difficult to draw such conclusions; we would not be able to explain variations. We must settle for determining whether exposure to safety information in an interpretive context is linked to higher levels of safety awareness. This can be roughly documented through use of evaluation instruments, or through the quizboard system we describe above. But, since our ultimate aim is to reduce accidents, we must insure that safety information is communicated to the people who need it most--those most prone to behave in ways that lead to accidents.

Once this target audience at risk is identified, we can determine how heavily its members are represented at those interpretive activities where safety messages are communicated. The more heavily they are represented, the more likely the safety component of the interpretive program is working on at least one dimension. Those who need to know safety information are in a position where they can at least find out.

Assumption.

We assume, of course, that being exposed to safety information will predispose our target population at risk to actually behave more safely. This assumption can be tested by examining previous experiments that demonstrate the relationship between presenting safety information and eliciting safe behavior. Experiments in promoting seat belt use might provide some insights.

Application.

1. Using the Interpretive Program Inventories, or drawing from your park's file of incident reports, identify that segment of the visitor population most prone to become involved in accidents, and the sites where these accidents are likely to occur.

2. At each interpretive activity where safety information is communicated (on or off-site) count the number of participants who appear to be from the target population at risk.
3. Calculate what proportion of your target population at risk has been touched by some relevant interpretive activity.

Analyzing Data.

This information will be most useful in determining the "drawing power" of your interpretive program. Low attendance by members of the target audience at risk may suggest the need to develop stronger methods of advertising activities, changing their content, or bringing them closer to where members of the target audience are--to schools, for example.

INSTRUCTIONS FOR COMPLETING THE "SELF-INVENTORY FOR
FRONT-LINE INTERPRETERS"

Introduction

Like all the paperwork your job demands, completing the attached Inventory will take important time away from your hours with visitors in the Park. Unlike most other paperwork, however, this task is designed to help you -- the front-line interpreter. By filling out the Inventory, you will be helping yourself to plan more effective and satisfying interpretive activities. You will also be helping the Service to determine just what resources you and your Park need to do the best possible job.

The Inventory is designed to permit the interpreter him/herself to describe all the important features of the interpretive activities with which they are involved. It is vital that you take this responsibility upon yourself. In most Parks, front-line interpreters have an important role in determining just what happens with interpretive programs; this is a vital element of the Service's approach to interpretation. Therefore, we have designed our Inventories to reflect this fact. Every Park Service staff member involved in personal services interpretation will be completing at least one of these forms -- not only in your Park, but in every Park across the country.

These Inventories are designed to help all of us answer a very simple question:

How do interpretive activities affect the visitors
who come in contact with them?

This is perhaps one of the most important questions that can be asked about our interpretive programs and activities. Without asking it, we cannot hope to continue providing the visitor with the most satisfying Park experiences we can.

Who needs to know the answer to this question, and why?

First, the people in Headquarters need to know more information on the way interpretive activities affect visitors so that they can better support the efforts of field staff. Right now, the only information about your activity that is regularly passed on to Headquarters is a simple head count. Headquarters staff has no idea of the kinds of activities you give, the types of people who show up, what they thought about the activity, or the kinds of new information or insights they come away with. Headquarters staff needs to know this information.

Without it they will be unable to secure the personnel and funds necessary to support a growing program of interpretation in the Parks.

Second, the interpretive supervisory staff in your Park need to know how interpretive activities affect the visitors who come in contact with them. They need this information to continually update the Park's interpretive program -- to make new plans and to revise existing ones. Nothing, of course, can substitute for the experienced judgment of a seasoned interpreter. But all too often these judgments leave with the interpreters when the season is over -- or the supervisor is transferred. The Inventories, then, will serve as an ever-growing collection of past experiences. When they are examined together, they will provide a clear understanding of what happened in seasons past: what activities were mounted, what worked, what seemed to be less successful, and most important, why.

Third, you as a front-line interpreter need to know more about the reasons some of your activities seem to "click" with the visitor, and some don't. The goals you set for each activity, the needs of the audience for whom it's intended, the kind of audience who actually attends, and the way it reflects the major interpretive themes of your Park: you must constantly work for a better understanding of all of these things so that you can plan activities that are more satisfying for you and the visitor.

The Inventory is designed as the first step in a process that will answer this question.

Definitions

A number of terms are used in the Inventory in special ways. Many of them are already familiar to you; you've seen them in NPS 6 (Guidelines for Interpretation) and elsewhere.

Front-Line Interpreter. The Park Service employee who holds primary responsibility for creating and "giving" an interpretive activity. The person who, during the interpretive activity, has face-to-face contact with the visitor.

Interpretive Activity. An event which is part of a Park's overall interpretive program, and puts the Park's interpretive staff into direct contact with visitors. Interpretive activities are designed to encourage the visitor to do something, know something, or feel something new or different. They include guided tours through caves, campfire talks on local flora and fauna, ice fishing demonstrations, and recreations of Civil War-era life in a small town -- to name just a few examples.

For the purposes of this Inventory, a single interpretive activity is one which is organized and given by a single interpreter, or one where the content and format of a "canned" activity remains the same -- regardless of who the interpreter is. A general title given to a series of activities that take place the same time each day is not considered to be a single interpretive activity.

"Edible Herbs" given by Paul Permanent

This would be considered a single interpretive activity even if it were scheduled, for example, as one of the daily "Morning Meanders".

"Edible Herbs" given by Suzy Seasonal

This would be considered a single interpretive activity distinct and separate from the one above, if Ms. Seasonal had developed her own approach. If she is simply repeating a canned activity, it would not constitute a separate and distinct interpretive activity.

"Swamp Stomp" given by the staff

Each separate activity created and given by individual interpreters under this generic title would be considered a distinct interpretive activity.

"Canoe Lessons" given by the staff

Unless each staff member had a unique and distinctive approach to teaching canoeing, this would be considered a single interpretive activity.

We are only interested in interpretive activities that are offered more than ten times a year.

Interpretive Program. The schedule series of special interpretive events and ongoing interpretive activities which take place in a Park. It is designed to broaden the enjoyment and knowledge of park visitors, and to serve management goals of visitor and resource protection.

Instructions

Who does what ? An Inventory will be filled out for each interpretive activity that fits the definitions listed above. The chief interpreter or senior interpretive supervisor will decide which interpreters will be asked to complete the various Inventories. In some cases, where activities are very similar, the supervisor may ask two or more interpreters to work on the same Inventory.

When all inventories are received by the interpretive supervisor, he/she will analyse the results and complete a form of his/her own. Through this process, the supervisor will receive an overview of the park's interpretive program. The supervisor will retain one copy to aid in program planning, and send another to Headquarters for further analysis.

What you do? The form is self-explanatory, and should take you about one hour to complete. Questions should be answered in the order they are presented, and every question must be answered. Please type out answers, or print legibly. If there is not sufficient room on a page, attach a sheet of paper which clearly indicates the number of the question being answered. If you have any questions, check with the chief interpretive supervisor.

IMPORTANT NOTE

We recognize that all interpreters do not have the information required to answer all of the questions on the following pages with absolute precision. Many questions ask for your opinion or thoughts, rather than for hard factual information. For those questions you cannot answer with precision, make the best approximation or the most educated guesses you can.

THANKS FOR YOUR HELP

Date _____

SELF-INVENTORY FOR FRONT-LINE INTERPRETERS

Interpreter(s) Name(s) _____

Park _____

Activity Title _____

Frequency Offered _____

1. At what location is this activity normally given? _____

2. During what time(s) of the year is this activity normally given?

_____ Summer _____ Winter

_____ Fall _____ Spring

3. During what times of the day is this activity normally given?

___ Morning ___ Afternoon ___ Evening ___ Nighttime

4. How many times a week is this activity normally given?

5. Every park has unique "stories" to tell. Which elements of those "stories" which of your park's themes -- are most clearly expressed in this activity?

6. Every activity is intended to affect the participant -- to encourage him/her to do something, see something, or think something different after he/she has gone through it. Rank the following objectives by priority. (Use # 1 as highest priority.)

- _____ The participant should know how to do a new skill.
- _____ The participant should know how a skill is done, but should not necessarily know how to do it her/himself.
- _____ The participant should know new facts about the subject.
- _____ The participant should have a new perspective -- a new way of thinking about the familiar world of nature around him/her.
- _____ The participant should have new insights into a culture or the past. She/he should be aware of the significance of certain key people and events.
- _____ The participant should act more safely within the park.
- _____ The participant should throw away her/his trash in proper receptacles, avoid picking flowers or marring trees, and exhibit other environmentally aware behavior.
- _____ The participant should seek new experiences in the park on her/his own.
- _____ The participant should recognize why the park was created.
- _____ The participant should identify personally with the park and care what happens to it.

7. When you initially planned this activity, whom did you see as its intended audience? (Check as many as apply.)

- Adults
- Teenagers
- Children
- Senior citizens
- Disabled people
- Family groups
- Organized groups, such as church groups or school classes.
- People who are in the park just for the day.
- Overnight visitors
- Local folks from the area
- People from outside the area
- Casual park users. People who seem to use the park as merely a "backdrop" to their own leisure activity -- such as sunbathers, picnickers or motorists.
- Intensive park users. People who come specifically to use the park's resources -- such as backpackers, campers or canoeists.

8. The subject matter of this activity deals with:
(Check one or as few as possible)

- A skill, such as bird watching, rock climbing or blacksmithing.
- A historic event, such as the Battle of Bull Run or the First Continental Congress.
- A natural event, such as the movement of stars in the night sky or the way the desert changes in winter.
- A place, such as a waterfall, a historic structure or the park itself.
- A person(s), such as John Muir or the Hopi Indians.
- An animal(s), such as mountain lions, catfish or dinosaurs.
- A plant(s), such as medicinal herbs or giant Sequoia trees.
- Park management, such as how trails are maintained or bear populations controlled.
- Other (describe) _____

9. Describe in your own words what you talk about and do during the activity.

10. Do you mention any information on resource protection during the activity?

Yes

No

If "Yes", what do you usually talk about?

11. Do you mention any information on visitor protection during the activity?

Yes

No

If "Yes", what do you usually talk about?

1 2 . What format do you use? (Check the one that most time is devoted to in your activity.)

_____ Guided tour. A walk or other tour where, for the security of the resource and/or the safety of the visitor, a guide is required -- such as tours through caves or other important archaeological sites.

_____ Conducted trips. Walks and other tours where the presence of guides is not required for resource or visitor protection, but where they are nevertheless used as an aid to visitors.

_____ Campfire / at-site talk, given at a camp site or other place of interest such as a historic house or a geyser.

_____ Demonstration, such as bear trap-setting or quilting, where the demonstrator and visitor talk, but there is no intent to teach a specific skill.

_____ Skill instruction, such as rock climbing or pottery making, where participants learn by doing.

_____ Living history. Recreations of historic events, or the daily lives of people from the past.

_____ Other (describe) _____

13 . How do most participants learn about the activity? Rank order the following media, and assign the #1 to the one which you feel carries the message to the largest number of your activity's participants.

- _____ Notices in area newspapers or magazines.
- _____ Newsletters or other materials published by the NPS regional office.
- _____ Newsletters or other materials published by the park, or a group associated with the park.
- _____ Activity schedules posted in park locations, such as visitor centers, park sites and nature centers.
- _____ From interpreters themselves.
- _____ Just happen to pass by while the activity is in progress.
- _____ Word of mouth
- _____ Other (describe) _____
-

14 . Which of the following phrases best explains why you think participants come to the activity?

- _____ They have a particular interest in the subject matter.
- _____ They like the interpreter, and come to many of his/her activities.
- _____ They want to learn more about the park and what's in it.
- _____ They have nothing better to do.
- _____ Someone -- a parent, a teacher, -- made them come.
- _____ They seem to need someone to help them feel at home in an unfamiliar environment.

15. Who comes to the activity? (Check only those who show up most often)
The activity's typical participant seems to be

- Adults
- Teenagers
- Children
- Senior citizens
- Disabled people
- Family groups
- Organized groups, such as church groups or school classes.
- Peer groups. More than two people of roughly the same age who came together.

They seem most usually to be

- People who've come to the park for just the day.
- Overnight visitors
- Local folks from the area
- People from outside the area.

Most are

- Casual park users. People who seem to use the park as merely a "backdrop" to their own activity -- such as sunbathers, picnickers or motorists.
- Intensive park users. People who come specifically to use the park's resources -- such as backpackers, campers or canoeists.
- Interpretive program users. People who seem to have come primarily for the interpretive activity.

16. What kind of visitors come to the park but don't seem to attend your activity?

17 . How many participants normally show up when the activity is scheduled?

Top number who come during busy times _____

Bottom number who come during slow times _____

Average or typical attendance _____

18 . What, do you feel, is the optimum number of participants in this activity for you to get your message across most effectively?

19 . Which of the following key factors seem most directly to affect attendance? Rank the following by priority. (Use # 1 as highest priority.)

_____ Total number of park visitors. I get the highest attendance on days when the park is crowded, and the lowest on days when it's empty.

_____ Advertising/publicity. I get the highest attendance when the activity is well publicized, and the lowest when it's not publicized at all.

_____ Presence of organized groups. I get the highest attendance when an organized group shows up, and the lowest when there's no organized group.

_____ Presence of other activities. I get the highest attendance when my activity is the only one offered at a given time, and the lowest when others are scheduled at the same time.

As an interpreter, you're already sensitive to whether your activity "worked" -- whether participants were affected by it. In determining whether you "connected", what signs do you look for? Rank the following in the order of their importance to you. (Use #1 as most important)

- ___ Participants seem to watch me during the activity.
- ___ Participants ask questions that show they've been listening.
- ___ During the activity participants become actively involved. For example, they touch the objects I'm talking about or try out the techniques I'm discussing.
- ___ Most people stay to the end.
- ___ People come up afterwards to make comments and ask questions.
- ___ Participants show up at other activities.
- ___ If I've suggested something for them to do on their own after the activity such as visit a place -- I see them doing it.
- ___ People seem to act more environmentally aware.
- ___ People seem to act more safely. They don't take chances.
- ___ Other (describe) _____

- ___ Other (describe) _____

- ___ Other (describe) _____

INSTRUCTIONS FOR COMPLETING THE "INVENTORY OF INTERPRETIVE PROGRAM AND ACTIVITIES"

Introduction

Like all other paperwork your job demands, directing the preparation of these Inventories will keep you at your desk -- instead of out in the park with visitors and staff. But unlike much of the paperwork, this Inventory process is designed to be of direct benefit to you -- the chief interpretive supervisor. By participating in it, you will be helping yourself create more effective and satisfying interpretive activities. You will also be helping the Service determine just what resources you and your park need to do the best possible job in interpretation and visitor services.

The SELF-INVENTORY FOR FRONT-LINE INTERPRETERS and the INVENTORY OF INTERPRETIVE PROGRAMS AND ACTIVITIES are designed to permit chief interpretive supervisors to systematically create a portrait of their park's overall interpretive program. With this "portrait" in hand, you will be able to ask and to begin answering two simple but vital sets of questions:

What are we doing now with our interpretive activities, and to whom?

What activities seem to work, and why? Which old activities should be modified, or which new ones added?

These questions are, of course, being asked all the time in virtually every park. Asking them is part of the interpretive planning process. But the answers are often difficult to find.

By the time the interpretive supervisor sits down to plan next season's schedule, the park's most valuable source of information -- the front-line interpreter -- has often left the park. And too often, they take with them a wealth of data on why some activities "clicked" while others "failed"; data on whom the activities were designed for, and who actually attended; data on what techniques were used to transmit the park's major interpretive themes, and how well they worked; data on how visitors seemed to react to the activities presented to them. By the time the last seasonal has left the park, the interpretive supervisor may be left with little more than a few remembered impressions and a scattering of visitor letters.

Why Inventories?

In part, the Inventories are designed to help you fill this information gap. They will constitute a permanent record of past seasons' experiences -- organized in such a way that year after year, they can be readily used to help plan future interpretive programs.

The Inventories are also designed to serve another, perhaps more important purpose. In the past, the most common way of measuring the "effectiveness" of interpretive activities was simply to count (more or less accurately) the number of visitors who participated in them. Thus a guided walk that touched 50 people a day was judged "more effective" than one which involved "only" 10 people. All of us know that numbers alone are no measure of effectiveness. Most of us, at some point in our professional careers, have tried to find ways of assessing not just the quantity of interpretive contacts, but their quality as well. We want to know

How do our interpretive activities affect the visitors who come in contact with them? How do they help us achieve our overall park management objectives?

The Inventories are the first step in a total management information system designed to help us continually to update and improve park interpretive programs, by suggesting what works, and what doesn't. It will foster innovation by providing a mechanism through which we can share our interpretive experiences. It will promote individual creativity by giving front-line interpreters and their supervisors tools they can use to build their own activities, and to monitor them.

At the Headquarters level, this system will help us support an expanding role for Interpretive Services -- by demonstrating with hard facts the close correlation between effective interpretation and other park management and Service-wide objectives.

The System.

The most striking feature of our system for assessing the impact of interpretive programs and activities is its simplicity.

It begins, as we've said, with the Inventories. The information they provide will be used to match easy-to-operate monitoring and evaluation techniques with specific interpretive activities. These monitoring and evaluation techniques will be applied in various parks by park staff, volunteers, or outside experts. Their results will be analyzed and fed back into park, regional and headquarters planning efforts. The process will be repeated annually.

In all cases, we will work to insure that monitoring and evaluation do not interfere with ongoing interpretation and management activities.

Some Definitions.

A number of terms are used in the Inventory in special ways. Many of

them are already familiar to you; you've seen them in NPS 6 (Guidelines for Interpretation) and elsewhere.

Interpretive Supervisor. The park service employee responsible for visitor contact/interpretation. This person holds responsibility for planning the overall interpretive program schedule, and for managing the park's interpretive staff. The exact title of this person will vary from park to park: the senior interpreter, chief of interpretation, chief park naturalist, district naturalist, or district interpretive supervisor, chief historian, etc.

Front-Line Interpreter. The Park Service employee who holds primary responsibility for creating and "giving" an interpretive activity. The person who, during the interpretive activity, has face-to-face contact with the visitor.

Interpretive Activity. An event which is part of a park's overall interpretive program, and puts the park's interpretive staff into direct contact with visitors. Interpretive activities are designed to encourage the visitor to do something, know something, or feel something new or different. They include guided tours through caves, campfire talks on local flora and fauna, ice fishing demonstrations, and recreations of Civil War-era life in a small town -- to name just a few examples.

Interpretive Program. The scheduled series of special interpretive events and ongoing interpretive activities which take place in a park. They are designed to broaden the enjoyment and knowledge of park visitors, and to serve management goals of visitor and resource protection.

Some Instructions.

An Inventory will be filled out for each interpretive activity that fits the definitions listed above. The chief interpreter or senior interpretive supervisor will decide which front-line interpreters will be asked to complete the various Inventories. In some cases, where activities are very similar, the supervisor may ask two or more interpreters to work on the same Inventory.

When all Inventories are received by the interpretive supervisor, he/she will analyze the results using the worksheet provided and complete an Inventory of his/her own. Through this process, the supervisor will develop an overview of the park's interpretive program. The supervisor will retain one copy to aid in program planning, and send another to Headquarters for further analysis.

1. Select activities and interpreters. Meeting with the staff, the interpretive supervisor determines which visitor services/interpretive activities meet the inventory's criteria, and thus are to be inventoried. The supervisor identifies the responsible interpreter(s) and provides instructions on how the SELF-INVENTORIES FOR FRONT-LINE INTERPRETERS are to be completed.

Generally, there should be one Inventory for each separate, single interpretive activity. Interpreters involved in many different activities, then, may have to fill out more than one form. The form itself takes no more than an hour to complete.

Recognizing that all park programs are unique, we cannot lay down any hard and fast rules on selecting activities or interpreters. However, the following guidelines should be observed whenever possible.

For the purpose of this Inventory, a single interpretive activity is one which is organized and given by a single interpreter, or one where the content and format of a "canned" activity remains the same -- regardless of who the interpreter is. A general title given to a series of activities that take place the same time each day is not considered to be a single interpretive activity.

"Edible Herbs" given by Paul Permanent

This would be considered a single interpretive activity even if it were scheduled, for example, four times a month. In this case Paul Permanent would complete an Inventory for the activity.

"Edible Herbs" given by Suzy Seasonal

This would be considered a single interpretive activity distinct and separate from the one above, if Ms. Seasonal had developed her own approach. In this case, she would complete an Inventory for the activity. If she is simply repeating a canned activity, it would not constitute a separate and distinct interpretive activity. In this case, she would join with the other interpreters to complete a single Inventory.

"Swamp Stomp" given by the staff

Each separate activity created and given by individual interpreters under this generic title would be considered a distinct interpretive activity. So, for example, if three interpreters presented three different activities under the title "Swamp Stomp", each would complete a separate Inventory.

"Canoe Lessons" given by the staff

Unless each staff member had a unique and distinctive approach to teaching canoeing, this would be considered a single interpretive activity, and the responsible staff would together complete one Inventory.

We are only interested in interpretive activities that are offered more than ten times a year.

2. Collect necessary documents. In preparing this form, you will need to refer to a number of memoranda and records. These include:

Annual Public Contact Report for last fiscal year
 Statement for Management
 Statement for Interpretation
 Seasonal Program Schedules of Monthly or Weekly
 Program Calendars,

Case Incident Reports (CIE)
 Accident and Property Damage Reports (DI 134)
 A map of the park on which key sites, districts,
 roads and trails are clearly marked.
 Self-Inventories for Front-Line Interpreters.

Not all parks have all the items on this list. But, before tackling the INVENTORY OF INTERPRETIVE PROGRAMS AND ACTIVITIES, collect copies of all of these available to you. You should not begin your work until the front-line interpreters have completed theirs.

3. Fill out WORK SHEETS for questions #8, 13, 14, 15 and 16 (attached).

4. Complete the INVENTORY OF INTERPRETIVE PROGRAMS AND ACTIVITIES.

The form is self-explanatory and should take about six hours to complete. Questions should be answered in the order they are presented, and every question must be answered. Please type out answers, or print legibly. If there is not sufficient room on a page, attach a sheet of paper which clearly indicates the number of the question being answered. If you have any questions, check with 9.

5. Mail a copy to _____, and keep one for your files. The package to _____ should include one copy each of:

- o All SELF-INVENTORIES FOR FRONT-LINE INTERPRETERS
- o INVENTORY OF INTERPRETIVE PROGRAMS AND ACTIVITIES
- o Annual Public Contact Report for last fiscal year
- o Statement for Management
- o Statement for Interpretation
- o Seasonal Program Schedules or Monthly or Weekly Program Calendars
- o Map of Park

IMPORTANT NOTE

We recognize that all interpreters do not have the information required to answer all of the questions on the following pages with absolute accuracy. For those questions you cannot answer with precision, make the best approximation or the most educated guesses you can.

WORK SHEETS FOR QUESTIONS # 8, 13, 14, 15, and 16.

Each of these questions requires recording data which appear on the Self-Inventories for Front-Line Interpreters. These work sheets are to help in the recording process. Since this recording is a clerical task, it can be assigned to one of your assistants.

Instructions.

1. Collect all completed Self-Inventories for Front-Line Interpreters.
2. Complete Work Sheets.
3. Transfer the results to the Inventory for Interpretive Programs.

These work sheets are intended as aids, for internal use only. Do not send them in to Headquarters.

WORK SHEET # A

8. INTERPRETIVE PROGRAM PARTICIPANT

Use the answers to Question # 15 on the Self-Inventory for Front-Line Interpreters in completing this question.

Enter a hatch mark for each Inventory on which the item is checked. For example, if five Front-Line Inventories check "Children" as a category under Question #15, enter ||||| next to the item. "Children" in this question.

- _____ Adults
- _____ Teenagers
- _____ Children
- _____ Senior Citizens
- _____ Disabled people
- _____ Family groups
- _____ Organized groups, such as church groups or school classes.
- _____ People who've come to the park just for the day.
- _____ Overnight visitors
- _____ Local folks from the area
- _____ People from outside the area
- _____ Casual park users. People who seem to use the park as merely a backdrop for their own activity -- such as sunbathers, picnickers or motorists.
- _____ Intensive park users. People who come specifically to use the park's resources -- such as backpackers, campers or canoeists.
- _____ Interpretive program users. People who seem to have come primarily for the interpretive activity.

WORK SHEET # B

13. INTENDED AUDIENCE

Use the answers to Question # 7 on the Self-Inventories for Front-Line Interpreters in completing this question.

Enter a hatch mark for each Inventory on which the item is checked. For example, if six Front-Line Inventories check "organized groups" as a category under Question # 7, enter ||||| next to the item "organized groups" in this question.

- Adults
- Children
- Teenagers
- Senior Citizens
- Disabled people
- Family groups
- Organized groups, such as church groups or school classes.
- People who are in the park just for the day.
- Overnight visitors.
- Local folks from the area
- People from outside the area
- Casual park users. People who seem to use the park as merely a "backdrop" for their own leisure activity -- such as sunbathers, picnickers or motorists.
- Intensive park users. People who come specifically to use the park's resources--such as backpackers, campers or canoeists.

WORK SHEET # C

14. SUBJECT MATTER

Use the answers to Questions #8, #10 and #11 on the Self-Inventories for Front-Line Interpreters in completing this question.

Enter a hatch mark for each Inventory on which the item is checked. For example, if four Front-Line Inventories check "a place" under Question #8, enter |||| next to the item "a place" in this question. If seven Inventories answer Question #10 "yes", place ||||| next to the item "Information on resource protection" in this question.

- _____ A Skill
- _____ A historic event
- _____ A natural event
- _____ A place
- _____ A person (s)
- _____ An animal(s)
- _____ A plant (s)
- _____ Park management
- _____ Information on resource protection
- _____ Information on visitor protection
- _____ Other

WORK SHEET # D

15. OBJECTIVE

Use the answers to Question #6 on the Self-Inventory for Front-Line Interpreters in completing this question.

Enter a hatch mark for each Inventory on which the item is checked. For example, if three Front-Line Inventories check "The participant should know new facts about the subject" under Question #6, enter III next to the corresponding item in this question.

- _____ The participant should know how to do a new skill.
- _____ The participant should know how a skill is done, but should not necessarily know how to do it her/himself.
- _____ The participant should know new facts about the subject.
- _____ The participant should have a new perspective -- a new way of thinking about the familiar world of nature around him/her.
- _____ The participant should have new insights into a culture or the past. She/he should be aware of the significance of certain key people and events.
- _____ The participant should act more safely within the park.
- _____ The participant should throw away his/her trash in proper receptacles, avoid picking flowers or marring trees, and exhibit other environmentally aware behavior.
- _____ The participant should seek new experiences in the park on his/her own.
- _____ The participant should recognize why the park was created.
- _____ The participant should identify personally with the park and care what happens to it.

WORK SHEET # E

16. FORMAT

Use the answers to Question #12 on the Self-Inventories for Front-Line Interpreters in completing this question.

Enter a hatch mark for each Inventory on which the item is checked. For example, if eight Front-Line Inventories check "Skill instruction" under Question #12, enter ||||| next to the corresponding item in this question.

_____ Guided tours

_____ Conducted trips

_____ Campfire / at-site talk

_____ Demonstration

_____ Skill instruction

_____ Living history

_____ Other (describe) _____

_____ Other (describe) _____

INVENTORY OF INTERPRETIVE PROGRAM AND ACTIVITIES

Date: _____

Park: _____ Address _____

District: _____
(If applicable)

Interpretive Supervisor: _____ Title: _____

The senior interpreter, chief of interpretation, chief park naturalist, district naturalist or supervisor responsible for visitor contact/interpretation should complete this document.

In preparing this form, you will probably need to refer to a number of memoranda and records. These include:

- _____ Annual Public Contact Report for last fiscal year*
- _____ Statement for Management*
- _____ Statement for Interpretation *
- _____ Seasonal Program Schedules or Monthly Program Calendars, Weekly Schedules*
- _____ Self-Inventories for Front-Line Interpreters*
- _____ Case Incident Reports (CIE)
- _____ Accident and Property Damage Reports (DI 134)

Please attach copies of the documents now available to you which are starred. If a seasonal or monthly program calendar is not available, attach representative samples of weekly schedules. Place a check mark before each of the documents you are attaching.

IMPORTANT NOTE:

We recognize that all parks do not have the capacity or the information required to answer all of the questions on the following pages in great detail. For those questions you cannot answer with precision, make the best approximation or the most educated guess that you can.

Please return this form and all attachments to

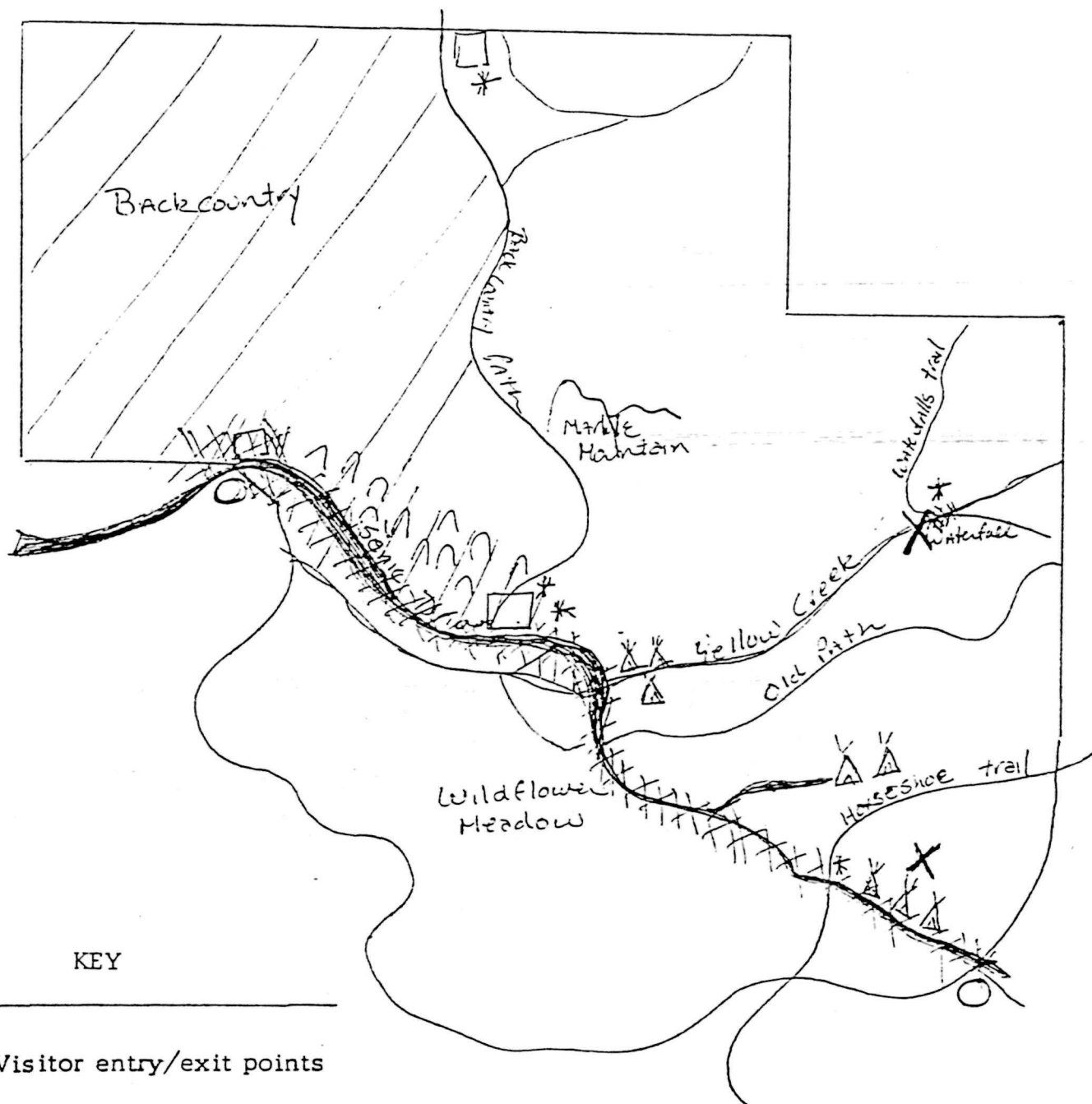
Attach a map to this package on which key sites, districts, roads and trails within the park are clearly marked.

On this map, please indicate:

- o visitor entry / exit points
- o sites and areas which are visited by most (over 70 %) visitors
- o sites and areas which are visited by very few (less than 25%) visitors
- o danger spots in the park -- where accidents occur
- o sites and areas where interpretive programs are offered
(Refer to Self-Inventories for Front-Line Interpreters in determining this.)

A sample map is attached. Please use the symbols found in the key.

Sample Map



KEY

- Visitor entry/exit points
- Visitors center/information centers
- ✕ Danger spots
- * Interpretive programs
- △* Campgrounds
- Areas visited by most visitors
- /// Areas visited by few visitors

1. Why was your park created? What are its principal historic, natural/scenic or cultural values?

List these park values in descending order of importance to your interpretive program. (For example, if your park is built largely around the site of a civil war battlefield, then this "value" should be listed first. Recreational or scenic values would be listed later.)

- (a) _____
- (b) _____
- (c) _____
- (d) _____
- (e) _____

2. Why are visitors attracted to your park?

Rank the following in order of importance to the average park visitor.
(Use #1 as highest priority.)

- _____ Because of its historic significance.
- _____ Because of its scenic beauty.
- _____ Because of its recreational resources.
- _____ Because of its wilderness and the opportunity it presents to
"get back to nature."
- _____ Other

3. What do visitors want to do when they come to your park?

Rank the following according to the proportion of visitors for whom
the "activity" is the prime motivation for coming to the park. Thus,
if most people come to the park for casual recreation, that should be ranked first.
If fewest come to the park to learn about its history, that should be ranked
last.

- _____ To learn about the park's historical or cultural significance.
- _____ To learn about the natural setting of the park, its ecology
- _____ To look at its scenic resources
- _____ To look at its historic sites
- _____ To do nothing
- _____ To "experience" nature
- _____ To "experience" a taste of the past
- _____ For casual recreation -- sunbathing, picnicking, a drive through
the country
- _____ For intensive recreation -- backpacking, canoing, camping, fishing,
climbing

4. YEARLY INTERPRETIVE PROGRAM SCHEDULE

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	De
Percentage of total visitation by month ^{1/}												
Percentage of public contacts by month ^{1/}												
Number of interpretive activities by month ^{2/}												
Available interpretive supervisory staff hours by month												
Available interpretive non-supervisory staff by month												
Planning period ^{3/}												

^{1/}Total of all months should add up to 100%.

^{2/}Include all activities which are part of the park's overall interpretive program, involve the park's interpretive staff, and are offered more than 10 times over the year.

^{3/}Place an 'x' in those months where interpretive program planning takes place.

5. List any voluntary groups or associations (such as "friends" groups or local "parks and history" associations) which are active in your park.

Name _____ Approx. members _____

Function _____

Name _____ Approx. members _____

Function _____

Name _____ Approx. members _____

Function _____

6. List any publications, calendars, monthly reports, newsletters etc. published by the Park or by a cooperating voluntary association which are distributed by mail (on request) to members of the public.

Name _____

Published by _____ (e.g. by "Friends of Great Falls")

Format _____ (e.g. mimeographed calendar)

Number Distributed _____

How often _____ (e.g. monthly, seasonally, etc.)

Cost per "run" _____ (e.g. total cost for one month's issue)

6.(continued)

Name _____

Published by _____

Format _____

Number Distributed _____

How often _____

Cost per "run" _____

7. PARK VISITORS

For all of the following types of visitors, write

A if it characterizes most of your park's visitors.

B if it characterizes some of your park's visitors.

C if it characterizes very few or none of your park's visitors.

_____ Adults

_____ Teenagers

_____ Children

_____ Senior Citizens

_____ Disabled people

_____ Family groups

_____ Organized groups, such as church groups or school classes.

_____ People who've come to the park just for the day.

_____ Overnight visitors.

_____ Local folks from the area.

_____ People from outside the area.

_____ Casual park users. People who seem to use the park as merely a "backdrop" for their own leisure activity -- such as sunbathers, picnickers or motorists.

_____ Intensive park users. People who come specifically to use the park's resources -- such as backpackers, campers or canoeists.

_____ Interpretive program users. People who seem to have come primarily for the interpretive activity.

8. INTERPRETIVE PROGRAM PARTICIPANT

Use Work Sheet #A in completing this question.

Enter the total number of hatch marks next to the appropriate item. For example, if on Work Sheet #A there are five hatch marks next to the category "Children" (|||||), enter 5 next to the item "Children" in this question.

- _____ Adults
- _____ Teenagers
- _____ Children
- _____ Senior Citizens
- _____ Disabled people
- _____ Family groups
- _____ Organized groups, such as church groups or school classes.
- _____ People who've come to the park just for the day.
- _____ Overnight visitors
- _____ Local folks from the area
- _____ People from outside the area
- _____ Casual park users. People who seem to use the park as merely a "backdrop" for their own leisure activity -- such as sunbathers, picnickers or motorists.
- _____ Intensive park users. People who come specifically to use the park's resources -- such as backpackers, campers or canoeists.
- _____ Interpretive program users. People who seem to have come primarily for the interpretive activity.

9. Describe the differences (if any) between the typical park visitor and the typical interpretive program participant.
-
-

10. MANAGEMENT OBJECTIVES

Use the Park Statement for Management in answering this question.

Rank the following management objectives, in order of their importance in your park. (For example, the top management priority in your park should be numbered "1". The next most important management objective should be numbered "2" and so forth.)

_____ To preserve and protect the natural resources.

_____ To preserve and protect the historic resources.

_____ To foster visitor appreciation and understanding of the area's natural setting and/or ecology.

_____ To foster visitor appreciation and understanding of the area's significance.

_____ To encourage safe use of the park.

_____ To provide recreational users with opportunities for hiking, backpacking, camping and other recreational activities.

_____ (Other) _____

_____ (Other) _____

_____ (Other) _____

_____ (Other) _____

_____ (Other) _____

Remember, these are park-wide management objectives.

11. INTERPRETIVE THEMES

Refer to the Park's Statement for Interpretation (if available) in answering this question.

In the space provided below, list the interpretive themes that form the core of the park's interpretive program.

Themes that refer directly to the park's physical resources: its natural environment or historic features.

(a) _____

(b) _____

(c) _____

(d) _____

Themes that refer to the abstract ideas these resources exemplify. For example, in an urban park, a theme might be the impact of man on the natural habitat. In an historic park, a theme might be the importance of water power to 19th century industry.

(a) _____

(b) _____

(c) _____

(d) _____

11. (Continued)

Themes that relate to management practices. For example, in a park with an important archaeological site, a theme might be the significance of the Park Service's work in preserving the remains of lost cultures.

(a) _____

(b) _____

(c) _____

(d) _____

Other themes

(a) _____

(b) _____

(c) _____

(d) _____

12. Using the answers to Question #5 on the Self-Inventories for Front-Line Interpreters and Seasonal Program schedules, estimate how many interpretive activities deal with each of the interpretive themes listed above.

<u>Theme</u>	<u>Proportion of Interpretive Activities</u>
Resources	
(a)	%
(b)	%
(c)	%
(d)	%
Ideas	
(a)	%
(b)	%
(c)	%
(d)	%
Management Practices	
(a)	%
(b)	%
(c)	%
Other	
(a)	%
(b)	%
(c)	%

This column should total 100%.

13. INTENDED AUDIENCE

Use Work Sheet #B in completing this question.

Enter the total number of hatch marks next to the appropriate item. For example, if on Work Sheet #B there are six hatch marks next to the category "organized groups " (|||||), enter 6 next to the item "organized groups" in this question.

- _____ Adults
- _____ Teenagers
- _____ Children
- _____ Senior Citizens
- _____ Disabled people
- _____ Family groups
- _____ Organized groups, such as church groups or school classes.
- _____ People who are in the park just for the day.
- _____ Overnight visitors
- _____ Local folks from the area
- _____ People from outside the area
- _____ Casual park users. People who seem to use the park as merely a "backdrop" for their own leisure activity -- such as sunbathers, picnickers or motorists.
- _____ Intensive park users. People who come specifically to use the park's resources -- such as backpackers, campers or canoeists.

14. SUBJECT MATTER

Use Work Sheet # C in completing this question.

Enter the total number of hatch marks next to the appropriate item. For example, if on Work Sheet #C there are four hatch marks next to the category "a place" (||||), enter 4 next to the item "a place" in this question.

- _____ A skill
- _____ A historic event
- _____ A natural event
- _____ A place
- _____ A person (s)
- _____ An animal (s)
- _____ A plant
- _____ Park management
- _____ Information on resource protection
- _____ Information on visitor protection
- _____ Other

15. OBJECTIVE

Use Work Sheet #D in completing this question.

Enter the total number of hatch marks next to the appropriate item. For example, if on Work Sheet #D there are three hatch marks next to "The participant should know new facts about the subject" (|||), enter 3 next to the corresponding item in this question.

- _____ The participant should know how to do a new skill.
- _____ The participant should know how a skill is done, but should not necessarily know how to do it her/himself.
- _____ The participant should know new facts about the subject.
- _____ The participant should have a new perspective -- a new way of thinking about the familiar world of nature around him/her.
- _____ The participant should have new insights into a culture or the past. She/he should be aware of the significance of certain key people and events.
- _____ The participant should act more safely within the park.
- _____ The participant should throw away his/her trash in proper receptacles, avoid picking flowers or marring trees, and exhibit other environmentally aware behavior.
- _____ The participant should seek new experiences in the park on his/her own.
- _____ The participant should recognize why the park was created.
- _____ The participant should identify personally with the park and care what happens to it.

16. FORMAT

Use Work Sheet #E in completing this question.

Enter the total number of hatch marks next to the appropriate item. For example, if on Work Sheet #E there are eight hatch marks next to "skill instruction" (|||||), enter 8 next to the corresponding item.

- _____ Guided tours
- _____ Conducted trips
- _____ Campfire / at-site talk
- _____ Demonstration
- _____ Skill instruction
- _____ Living history
- _____ Other (describe) _____
- _____ Other (describe) _____

17. Using the park's accident reporting system, list the four top accident categories in order of frequency.

Type _____ Incidents per year _____

Type _____ Incidents per year _____

Type _____ Incidents per year _____

Type _____ Incidents per year _____

18. For each accident category, describe the most accident prone population.

Type _____

Age _____ Sex _____

Local resident: Yes _____ No _____

Type _____

Age _____ Sex _____

Local resident: Yes _____ No _____

Type _____

Age _____ Sex _____

Local resident: Yes _____ No _____

Type _____

Age _____ Sex _____

Yes _____ No _____

APPENDIX II

IMPLEMENTING THE SYSTEM: YEAR ONE

The first year should be devoted to pilot testing and refining all elements of the system and all materials developed for it. Field testing will permit adequate materials refinement, shakedown of the management system, and will allow those ultimately charged with its implementation to become involved in shaping it. The park personnel who participate in the field test will learn first-hand the ways in which the information generated by program monitoring and evaluation can be of direct benefit to them and their work. Through this process, they will develop a sense of ownership, which will ultimately help ease the system's acceptance by their colleagues in other parks. Finally, the test period will permit WASO to find incentives which they can build into the system to encourage its appropriate use by park staff.

The test should be managed by WASO and involve a small number of parks from across the nation.

The parks selected for the field test should

- o By their size, interpretive program, management objectives, visitor load and location, be representative of parks throughout the System;
- o Have peak interpretive seasons which span months #2 through 7, so that front-line interpreters and interpretive supervisors can complete their inventories during the season;
- o Have interpretive program planning periods which fall roughly between months #9 through 11, so that the results of the studies can be integrated into next season's plans.

In future years, administration and management of the evaluation system will be shared by WASO and the regional offices. For example, each regional office will hold responsibility for mounting evaluation conferences for parks in its area.

APPENDIX III

SAMPLE CONFERENCE AGENDA

IntroductionOverview of Evaluation System

Rationale for evaluation and monitoring of interpretive programs and activities. Description of how results will be used to assist park and Headquarters' interpretive program planners. Description of evaluation system; division of responsibility. Identification of activities for in-depth evaluation.

WorkshopsEnvironmentally-Aware Behavior

Introduction of monitoring techniques that measure change in interpretive activity participants' behavior in the park. Application of techniques in the park setting. Description of ways resulting data can be used to improve interpretive activities.

WorkshopSafety Behavior

Introduction to monitoring techniques that measure change in interpretive activity participants' behavior in the park. Application of techniques in the park setting. Description of ways resulting data can be used to improve interpretive activities.

WorkshopAttitudes Toward NPS and Park Mission

Introduction to monitoring techniques that measure changes in participants' attitudes towards the specific park and towards NPS. Application of techniques in park setting. Description of ways resulting data can be used to improve interpretive activities.

Workshop

Knowledge about the Park

Introduction to monitoring techniques that measure change in interpretive activity participants' knowledge about the park's "story" and its offerings. Application of techniques in the park setting. Description of ways resulting data can be used to improve interpretive activities.

Conclusion

Summary

Question and answer period. Discussion of reporting procedures, and the types of assistance available from Headquarters. Distribution of appropriate materials.

Opportunities for park personnel to solve problems in implementing techniques in their own parks will be provided in individualized sessions throughout the Conference period.

APPENDIX IV

SAMPLE CONTENT FOR QUIZBOARD PROGRAMS

Video Display #1 Good Afternoon.

 Welcome to John Doe National Historic Park. We're pleased that you've decided to play DOEQUIZ. It's more than a game. We use DOEQUIZ to help us make John Doe a better, more enjoyable park.

 Before we begin, we would like to ask you a few questions about your visit to the park so that we can make sure our DOEQUIZ is right for you.

 YES Press "Y" if you want to answer questions about your visit to the Park.* (Go to #Y1)

 No Press "N" if you don't want to answer any questions about your visit to the park.** (Go to #Q1)

Video Display #Y1 How old are you?
(If Yes)

 Under 18 Press "1"

 18-21 Press "2"

 21-35 Press "3"

 35- Press "4"

Video Display #Y2 How long do you plan to stay in John Doe Park?

 Less than 3 hours Press "1"

 3-6 hours Press "2"

 All Day Press "3"

 More than one day Press "4"

* "Tokens" could be explicitly "awarded" only to those who permit their answers to be recorded.

** Players who answer "no" are, of course, dropped from our sample. The number of "no" responses, however, could easily be recorded.

Video Display #Y3A Did you go on any tours of John Doe Park led by a park ranger or other park employee?

YES Press "Y"

NO Press "N"

#Y3B Did you attend a talk about John Doe's attack on Fort Marmoset?

YES Press "Y"

NO Press "N"

#Y3C Did you visit the site where Park historians and archeologists are uncovering the remains of Fort Marmoset?

YES Press "Y"

NO Press "N"

#Y3D Did you visit any of the reconstructed shops or houses in the "Town of Marmoset?"

YES Press "Y"

NO Press "N"

#Y4 Now we're ready to play DOEQUIZ!

We'd like to keep a record of your answers to the DOEQUIZ so that we can use them to improve the services we provide at John Doe Park. It's like an electronic suggestion box. If that's ok with you, press yes. If you'd prefer that we didn't keep your answers, press no.

YES Press "Y" (to Q1) (Record in File xxx)

NO Press "N" (to Q1)*

* The number of people who refuse to permit their answers to be recorded should be counted and differentiated according to the criteria built into the Introductory Question. Knowing who is willing to "help improve the park" and who isn't is also an interesting bit of information.

The number and complexity of introductory questions and how they are processed will depend on the data storage capacity and power of the microprocessor package selected for the quizboard. One system that might be employed to differentiate players would involve generating a separate data storage file for each category of visitor under study. These files would be assigned a code number which corresponds to each possible set of answers to the introductory questions. For example, if we use a three-digit file code number, we can then retrieve players test responses in groups defined by three specific demographic or park use characteristics.

If the player, for example, answered "3" to Question Y1 (if he is between the age of 21 and 35), then "3" would be the first digit of his file number. If he plans to stay in the park all day, then "3" would be the second digit in his file number. The last digit could represent an index drawn from a composite of the answers to the four parts of Question Y3.

EXAMPLE

Code 233	18-21 years old.
	Day visitor in park.
	Maximum interpretive contact.

Code 411	Over 35.
	Less than 3 hours in park.
	Minimum interpretive contact.

This file code system for aggregating and retrieving test data is described for illustrative purposes only. More potent approaches can no doubt be developed. Likewise, limitations on data processing capacity might force adoption of a less sophisticated system.