

The Park Manager's View of Environmental Interpretation as a Management Tool

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Introduction

Interpretation has been defined as "an educational activity which aims to reveal meaning and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information" (20). Sharpe (18) calls interpretation the "communication link" between the park visitor and the park's resources. Interpretation is widely accepted as a "public service" activity. A key benefit is the enriched experience of the visitor who, because of interpretation, enjoys increased awareness, appreciation, and knowledge of the values of the property. In addition to providing a service to visitors, interpretation can be used to aid in achieving resource management objectives.

Purpose

This study focused upon the question of the degree to which this second benefit—interpretation as a management tool—is accepted by property managers. It sought the specific values perceived by administrators of public wildlife, forest, and recreation areas.

Literature Review

Dunmire (4) stated that interpretation is "among the park and recreation manager's most powerful tools . . ." Sharpe (18) recognized that major objectives of interpretation are to accomplish management goals and to promote public understanding of an agency. Others have also discussed the value of interpretation as a management tool (2,6,12,14,19,21). There also have been many specific examples in the literature of how interpretation has been used successfully as a management tool (1,3,4,5,8,9,10,11,13,15,17,22).

Although this "interpretation as a management tool" theme has been very prevalent in recent literature, there is some question as to whether or not the message has been effectively communicated to the people who need it most—the resource managers and administrators. It has not been documented that these administrators view interpretation as a benefit to management.

Griest (7) surveyed wildlife refuge managers and interpreters about the values of interpretation. She concluded that the perceptions of the two groups differ significantly and that this may inhibit cooperation in interpretative work. Communication between managers and interpreters was not strong. Managers have not received proof of the benefits of interpretation. Sharpe and Gensler (19) pointed out that manager-interpreter conflict is inhibiting the use of interpretation as a management tool.

Braley and Hanna (2) concluded that "the use of interpretation as a management tool is not as well defined nor as understood as it could be" and also that "the application of interpretation as a management tool is not as widespread as its success might warrant."

Methods

Two hundred questionnaires were sent to managers of various public properties. The questionnaires were designed to determine how property managers felt about interpretation as a management tool. The emphasis of the sample was on Indiana properties. Every Indiana state park, state fish and wildlife area, state forest, and state reservoir was sampled. In addition, nationally, 66 randomly selected county park systems and 75 randomly selected national wildlife refuges were also sampled. One hundred and three property managers responded, giving a response rate of 51.5%. All of the computations and statistical analyses were carried out by using the appropriate SPSS computer programming package (16).

Results

The combined responses of all 103 respondents are shown in Table 1. The benefit questions presented in Table 1 are worded as they were on the questionnaire. Two

TABLE 1. The responses of 103 property managers to questions pertaining to the benefits of interpretation.

Benefit questions	Yes	No	Don't Know/No Answer
Would you expect interpretive facilities to:			
-Decrease poaching?	39 (37.9%)	64 (62.1%)	0 (0.0%)
-Decrease vandalism?	53 (51.5%)	48 (46.6%)	2 (1.9%)
-Decrease other forms of misbehavior (littering, theft, etc.)?	61 (59.2%)	40 (38.8%)	2 (1.9%)
-Increase carrying capacity?	52 (50.5%)	48 (46.6%)	3 (2.9%)
-Increase public support and cooperation?	95 (92.9%)	6 (5.8%)	2 (1.9%)
-Assist in meeting the goals of the property?	96 (93.2%)	7 (6.8%)	0 (0.0%)
-Offer no benefits to the property manager?	1 (1.0%)	102 (99.0%)	0 (0.0%)
Assuming you had sufficient funds and manpower would you like to have more in- terpretation on your property?	93 (90.3%)	10 (9.7%)	0 (0.0%)

generalizations can be supported by these data. First, property managers perceive interpretation as a beneficial activity. Only one respondent expected no benefits as a result of having interpretation; over 90% of the respondents said they would desire more interpretation on their properties. Several of the respondents who indicated they did not want more interpretation said that interpretation was very beneficial but they currently had an optimum amount of it on their properties. Thus, the 9.7% not wanting more interpretation should not be construed as managers with a low opinion of interpretation.

The second generalization is that the expectations of the managers varied greatly with the type of possible benefit. Over 90% of the managers believed 1) that interpretation would increase public support for the agency and 2) that it would assist in the meeting of the goals of the property. Managers had more divided opinions about

the ability of interpretation to provide four other benefits related to resource maintenance and protection. Almost 60% of the managers thought interpretation would decrease general misbehavior. Just over 50% thought interpretation would decrease vandalism and increase carrying capacity. Less than 40% of the managers thought interpretation would decrease poaching.

Responses By Agency Type

When the responses were compared by agency, statistically significant relationships were found for the question dealing with poaching ($X^2 = 13.75$, significance = 0.0033λ , = 0.2307) and vandalism ($X^2 = 10.70$, significance = 0.0135λ , = 0.2083). It is interesting to note that the two groups (federal and state wildlife agencies) which may be the most affected by poaching were the most skeptical concerning the ability of interpretation to decrease it (Table 2). Less than 30% of the federal wildlife managers

TABLE 2. The responses of property managers by agency type to the following question: "Would you expect interpretive facilities to decrease poaching?"

Responses	Agency Type				
	*State Parks (n = 12) and State Reser- voirs (n = 2)	*State Forests (n = 6) and State Wildlife Areas (n = 14)	National Wildlife Refuges (n = 54)	County Parks (n = 15)	Totals
YES	5 (35.7%)	7 (35.0%)	15 (27.8%)	12 (80.0%)	39 (37.9%)
NO	9 (64.3%)	13 (65.0%)	39 (72.2%)	3 (20.0%)	64 (62.1%)
TOTALS	14 (100%)	20 (100%)	54 (100%)	15 (100%)	103 (100%)

$X^2 = 13.75$ significance = .0033

*The responses of these agencies were combined to create suitable cell sizes for Chi-square analysis. Similarities in recreation management philosophies and strategies were considered in the determination of the agency groupings.

thought interpretation would decrease poaching. In contrast to the wildlife refuge managers, 80% of the county park managers thought interpretation would decrease poaching. Federal wildlife managers again had the lowest percentage (40.7%) of managers who believed interpretation would decrease vandalism (Table 3). Once again, 80% of

TABLE 3. The responses of property managers by agency type, to the following question: "Would you expect interpretive facilities to decrease vandalism?"

Responses	Agency Type				
	*State Parks (n = 12) and State Reser- voirs (n = 2)	*State Forests (n = 6) and State Wildlife Areas (n = 14)	National Wildlife Refuges (n = 54)	County Parks (n = 15)	Totals
YES	9 (69.2%)	10 (50.0%)	22 (40.7%)	12 (80.0%)	53 (52.0%)
NO	4 (30.8%)	10 (50.0%)	32 (59.3%)	3 (20.0%)	49 (48.0%)
TOTALS	13 (100%)	20 (100%)	54 (100%)	15 (100%)	102 (100%)

$X^2 = 10.70$ significance = .0135

*The responses of these agencies were combined to create suitable cell sizes for Chi-square analysis. Similarities in recreation management philosophies and strategies were considered in the determination of the agency groupings.

the county park managers thought interpretation would be beneficial in deterring vandalism.

The agencies were ranked on the basis of their manager's expectations concerning the benefits of interpretation (Table 4). For each agency, the mean percentage

TABLE 4. The ranking of the agencies based on the mean percentage of "yes" responses to the 2 questions for which a significant relationship existed between agency type and response.

Agency (n)	Average percentage
County parks (15)	80.00%
State forests (16)	66.65%
State parks (12)	50.00%
State reservoirs (2)	50.00%
USFWS (54)	34.25%
State FWAs (14)	32.15%

of managers responding "yes" to the two questions where there was a statistically significant difference between agencies was calculated. Using this ranking, the county park managers had the highest expectations concerning the benefits of interpretation and the wildlife managers had the lowest.

Responses By Education Level

Managers were asked to indicate the highest level of education that they had completed. Eighteen (17.6%) had a masters degree, 77 (75.5%) had completed a bachelors degree and seven (6.9%) had only completed high school. There was one missing value. For the vandalism question, 42.9% of those having only a high school education thought interpretation would decrease vandalism. This percentage increased to 46.8% for those managers with a bachelors degree and 72.2% for those with a masters degree.

For five out of the six questions the data show a pattern of increasing expectations concerning the benefits of interpretation with increasing education level. The mean percentages, by education, of yes responses to the benefit questions are shown in Table 5. These mean percentages also indicates that expectations may increase slightly with education level.

TABLE 5. Ranking of highest education level completed by the property managers based on the mean percentage of "yes" responses to the 6 benefit questions.

Education level (n)	Average percentage
Masters degree 18	74.98%
Bachelors degree 77	61.70%
High School 7	59.53%

Responses By Age Class

Fifteen (15.8%) of the managers were in the 20-29 age class, 45 (47.4%) were in the 30-39 age class, 31 (32.6%) were in the 40-49 age class, three (3.1%) were in the 50-59 class, and one (1.1%) was in the 60 or greater class. Eight managers did not respond.

Again there seems to be a pattern in the responses. Generally the managers in the younger age groups had higher expectations concerning the benefits of interpreta-

tion. The mean percentage of affirmative responses for the six benefits are shown for various age groups in Table 6.

TABLE 6. Ranking of age groups of property managers based on the mean percentage of "yes" responses to the 6 benefit questions.

Age Class (yrs.)	(n)	Average percentage
20-29	23	72.23%
30-39	45	65.18%
> 40	35	57.62%

Discussion and Conclusions

Among interpreters, there are off-expressed sentiments implying that managers don't understand or appreciate the values of interpretive programs. If the responses to this survey are representative there is deeper, steadier support of interpretation as a process than may be evident in day-to-day interactions among managers and interpreters. This suggests that interpreters should take positive attitudes toward the role of their work, with confidence in its basic importance. Criticism or denial of support of specific items need not be interpreted as lack of support for the whole program. Although some managers may see little or no value in interpretation, most are positive about it.

Younger and more educated managers seem to be particularly strong supporters of interpretation. Explanation of this phase of property management in universities may play a key role in promoting further understanding.

This is not to say that all managers agree about which specific benefits interpretation can produce. Agency image and public understanding of management goals are two key values seen by most property administrators. Interpreters would do well to build upon these in designing their exhibits, publications and programs.

Claims by interpreters that their work will reduce poaching, vandalism or misbehavior may not be respected by their managers. Likewise, claims for increasing carrying capacity through information may encounter resistance.

Assuming there is money available or there is little increase in cost, most interpreters could expand their programs without incurring dissatisfaction from their bosses. There should be no reluctance to include expanded programs in any plan for the manager's review.

Managers appear to be aware of interpretation and at least some of its values to the agency. Maintaining a flow of information from interpreters to managers should help the understanding of the specific program values on the property.

The results of this study do not suggest that the interpreter is an isolated, unsupported member of the management team. Although the specialized work may keep the individual interpreter somewhat separated, there appears to be strong support for his or her function.

Interpreters can enhance their management image by avoiding a negative self image. Their jobs are seen as a valuable part of the park management team. Interpretation should, and can, build within this positive light.

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