

WILDERNESS VALUES AND ARCHAEOLOGICAL RESOURCE MANAGEMENT

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ABSTRACT. Most archaeological sites in wilderness have value primarily for the information they can yield. Often, information value can be realized only through methods such as excavation and artifact collection that physically consume part of the site and remove specimens from archaeological context. The required management emphasis is **conservation**-i.e., protection coupled with frugal, long-term use. Wilderness, on the other hand, has value primarily for its symbolic and aesthetic qualities. Scientific, educational, and economic values are secondary. Primary wilderness values generally can be realized without physically altering the wilderness environment; hence, **preservation** of natural character and process is the preferred management emphasis. It is argued that archaeological resources in wilderness can be managed in a conservation framework that permits both consumptive use and active protection measures, but that special care must be taken to implement these measures in ways that minimize conflict with the preservation of wilderness values.

Resources are things of value. This paper briefly addresses several questions regarding values and management of archaeological resources in wilderness areas: 1) What are the similarities and differences in the resource values of wilderness and archaeological sites, respectively? 2) Are different management strategies required by the principal values of each kind of resource? 3) Are there special constraints on archaeological research and resource management in wilderness areas? Figure 1 shows the paper's elements in graphical form. Values are on the left and right sides of the diagram, principal management emphases are at top and bottom, and in the center are issues facing cultural resource managers in wilderness areas. Width of the arrows indicates the strength of the relationship.

Throughout, the cultural side of the discussion focuses on archaeological sites, which ordinarily are the largest subset of cultural resources in wilderness areas. Other types of cultural resource, not directly discussed here, include occupied historic buildings and Native American religious shrines. The discussion of archaeological values largely follows Lipe (1984).

WILDERNESS RESOURCE VALUES

The Wilderness Act of 1964 emphasizes symbolic and aesthetic values. Wilderness is seen as a resource to be preserved so that Americans can experience natural environments "untrammelled by man." As I interpret the law, such areas can symbolize man's dependence on nature, as well as the historic struggles of American pioneers to settle a continent they viewed as "wild." Further, the language of the Act implies that wilderness is to be preserved

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and used as a place of beauty and solitude which induces contemplation of nature and of man's place in it, and in which the visitor can gain spiritual renewal.

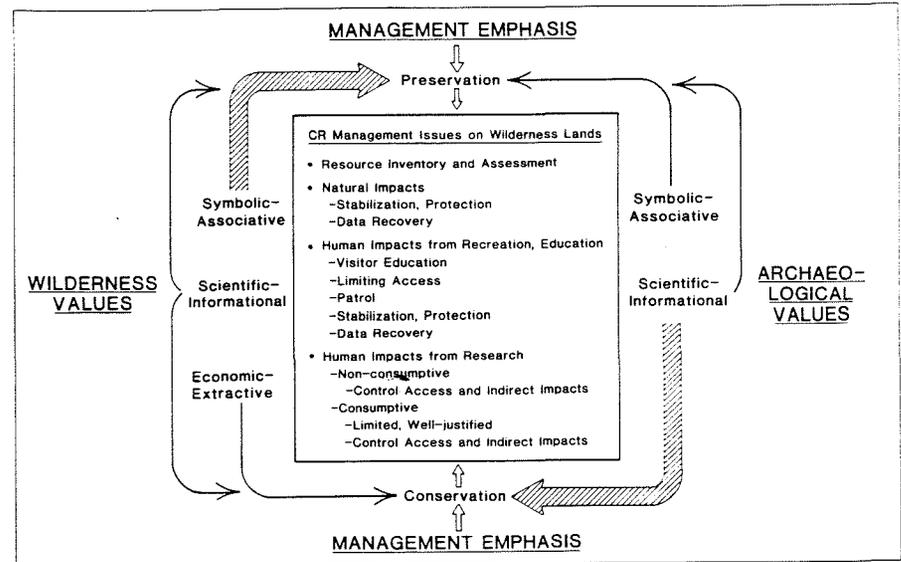


Figure 1. Values and management emphases in relation to archaeological management issues in wilderness areas.

A secondary theme in the Act is the educational and scientific value of wilderness, as in Section 2(a); Section 2(c)(4); and Section 4(b). In 4(b), historical as well as scientific and educational uses are mentioned as among the public purposes for which wilderness is to be managed. It is clear that wilderness areas are to be places where scientific and historical information can be gathered, and where education can be furthered, either in the wilderness itself or on the basis of studies done there. Research and education can be seen as helping Americans make better use of both the symbolic and economic values of wilderness.

A minor theme in the Wilderness Act is the economic value of resources that can be extracted from wilderness. Section 4(d) provides for prospecting, mining, grazing, hunting, and fishing, with various limits and constraints. Commercial services to support recreation or other public purposes are also permitted. Though not addressed in the Act, the indirect economic effects of wilderness may include expenditures on transportation, equipment, supplies, publications, etc. by wilderness users.

ARCHAEOLOGICAL RESOURCE VALUES

The three value themes noted for wilderness can also be seen in archaeological resources. Some archaeological sites--e.g., well-preserved cliff dwellings, stabilized excavations, rock art panels--have value as symbolic or associative resources meaningful to lay visitors lacking

archaeological training. Such sites can symbolize, and provide visible, tangible associations for the accomplishments of Native American and pioneer Euro-American cultures. Such sites often can be used to stand for whole periods or major events in the histories of these cultures. Many such sites also have aesthetic qualities.

When wilderness visitors encounter visible, interpretable evidence of earlier people, it may help them place their own experience with nature in perspective by helping them visualize how their predecessors adapted to the same kind of environment. Such encounters may also help promote greater appreciation of Native American cultures. The prevailing mythology sees all of North America prior to European settlement as a "wilderness," when in fact it was home to more than a million Native Americans, many of whom lived in or regularly used many of the areas now set aside as wilderness.

Although the kinds of sites mentioned above are important, they generally constitute only a small fraction of the total archaeological record in a given wilderness area. Most archaeological sites are relatively small or obscure, and hence difficult to recognize and interpret by persons not trained in archaeology. Their principal value is as sources of information in scientific research. This, in turn, depends on systematic surface recording and excavation, with follow-up study of the patterns of association among artifacts, features such as hearths, datable materials such as charcoal, floral and faunal remains indicative of subsistence and/or local environment, etc. The location of sites relative to one another and to environmental variables (e.g., water sources, vegetation communities) can also reveal much about a past society's economy and organization.

Information gained from systematic archaeological study enables archaeologists to reconstruct the characteristics and sequence of past cultures in an area. The resulting collections and technical publications contribute to public education by providing basic materials for development of museum displays, popular articles, and educational TV or film productions. On-the-spot understanding of symbolically valuable sites is also enhanced when visitors can be provided advance knowledge about the past culture that created the sites they visit.

Indirect economic effects occur when rock art or other obvious sites help attract visitors to a wilderness area. The direct economic values created by the growing market for antiquities have dire consequences for the resource itself. Excavation focused just on obtaining rare "goodie" artifacts invariably destroys much of a site's information potential, because contextual relationships among the various kinds of archaeological evidence are lost. In federal wilderness areas (and on all federal lands) it is illegal to excavate archaeological sites without a scientific permit. Even in wilderness areas, unauthorized digging to acquire artifacts for personal collections or the market is a serious and increasing problem.

MANAGEMENT STRATEGIES

Preservation

For both wilderness and archaeological resources, symbolic and aesthetic values are ordinarily best managed by a strategy of preservation—that is, keeping the resource unchanged. In wilderness, this means letting the natural processes that existed prior to the introduction of human "trammeling" continue to control the character of the environment. For archaeological sites with symbolic/aesthetic values, it means protecting those qualities that enable visitors to use the site as a tangible link to the past.

The symbolic and aesthetic values of both wilderness and archaeological resources ideally can be obtained by users without degrading the resource. That is, gaining spiritual renewal from contemplating a wilderness landscape or a rock art panel does not erode the resource itself. There may, of course, be indirect impacts from visitor traffic and logistics.

The dominance of symbolic/aesthetic values in wilderness thus leads to preservation as the prevailing management strategy for the wilderness area as a whole. For most of the archaeological sites in wilderness, however, the preferred management strategy is conservation: protection, but with the expectation of long-term, frugal, consumptive use.

Conservation

Information potential gives most archaeological sites their primary value, and obtaining this value requires research, which may alter the physical character of the site itself, as in excavation or surface collection. Sites that have high symbolic or aesthetic values generally have information potential as well. Consumption of the archaeological record through research, even for good reason, is a serious issue, because the supply of archaeological sites for any given period of the past is finite; they comprise a nonrenewable resource. Furthermore, even if research today uses state of the art methods, future work might be even more productive, when better methods of data recovery and analysis have been developed. In fact, the better the field of archaeology performs, the more rapidly will existing methods and techniques become obsolete. Yet to preserve all sites now in hope of greater returns in the future would be counter-productive, because development of research questions and methods depends largely on continuing application and testing in the field.

In a broader perspective, it is not research use, but artifact collectors, commercial looters, land development, and natural erosion that are main threats to the finite archaeological resource base. In response, most U.S. archaeology follows a broad conservation strategy designed to maximize archaeological information recovery over the long run. This involves efforts to slow the loss of resources by controlling or mitigating the impacts of development and looting, while at the same time allowing continuing exploitation for research, but in a controlled, frugal manner. When public lands, funds, or licenses are involved, these efforts are facilitated by the National Historic Preservation Act of 1966 (as amended 1980) and the Archaeological Resources Protection Act of 1979.

These laws, plus provisions of the Wilderness Act that refer to scientific and historical values, make it clear that archaeological resources are to receive attention and affirmative management in wilderness areas. Archaeological research, including excavation, appears to be authorized on federal wilderness lands under the Act's provisions referring to scientific uses. Furthermore, the most basic and important archaeological resource value is information, which is acquired through research, some of which may be consumptive. To say that because the primary management strategy in wilderness is preservation and hence no consumptive archaeological research will be permitted is tantamount to "writing off" the majority of archaeological resources. If their primary value can never be realized in wilderness settings, they cease to be resources. Clearly, this is not the intent of the Wilderness Act or other federal laws that recognize the potential of archaeological sites to contribute information about American prehistory and history.

ARCHAEOLOGICAL MANAGEMENT ISSUES IN WILDERNESS

Inventory and assessment

All federal wilderness areas in the U.S. probably have at least some archaeological sites, and many of them have large numbers. My impression, however, is that wilderness areas are generally even less well inventoried than are other types of public land. The prevailing view seems to be that because little development takes place in wilderness, the sites are "safe" and can be managed by neglect. Although promoted by tight budgets, this approach represents an abdication of management responsibilities. Without inventory and assessment, it is impossible to manage the resource at all--i.e., to evaluate its extent and importance, identify the threats it faces from human or natural agencies, and develop positive programs of interpretation and protection. Wilderness is no different from other types of public land in this regard.

Limited funds often make complete inventories a goal for the future, but we can begin to acquire useful management information through well-designed sampling surveys. Furthermore, human impacts to archaeological sites are usually greatest along trails, at campgrounds, etc. Inventorying these locations requires survey of only a small fraction of the wilderness area, but may yield vital information on both management problems and interpretive opportunities. Testing may be necessary to assess the informational and symbolic potential of some sites. Inventory and testing should be carried out without mechanical aids in a manner that preserves wilderness qualities, and surfaces of tested sites must be restored to their original appearances.

Natural impacts

In a wilderness area, what does a manager do when a significant cultural resource is being destroyed by natural erosion? Is stabilization or other physical protection justified? Should the site be excavated to acquire as much information as possible before it is lost? Or should nothing be done? It seems to me that in wilderness, where natural forces presumably dominate the efforts of humans, the third option carries more weight than it would on other types of public land. Options one or two might be justified if the site were exceptionally important as a symbolic or informational resource, and if the work could be carried out in a manner consistent with maintaining wilderness character. Stabilization, construction of retaining walls, etc., would have to be done very skillfully, so that these modern alterations, and use of modern materials and techniques, are not evident.

Human impacts from recreation

It is my experience that in many wilderness areas, archaeological sites often occur in camping areas or along trails, and that obvious sites are themselves attractions. Resources can thus be damaged through human or horse traffic, touching rock art, picking up surface artifacts, unauthorized excavation, etc. In such cases, the wilderness manager is well justified in attempting to stop the loss of resource value. The hard question is what management actions will be both effective and compatible with maintaining wilderness quality. For example, protective fencing and signs would seem out of order for all but the most severe threats.

Though a detailed survey of possible responses is inappropriate, several general approaches seem reasonable. Many visitor impacts to archaeological sites result from lack of knowledge about the importance and fragility of the resource, and the value of keeping artifacts in site context. Archaeological protection messages may be well received if the visitor can be reached

through orientation media or by ranger contacts in the field. Other alternatives are relocating trails and camping areas to reduce negative impacts, or using natural materials such as boulders or logs to direct traffic away from sensitive areas. "Hardening" by site stabilization or protective devices may be an option, subject to the same constraints on visibility and modern technology as noted above. A last resort is excavation or recording to salvage information values (data recovery). This implies that the threat is immediate and severe, and other options have failed or cannot be implemented.

Human impacts from research

Archaeological research in wilderness areas--whether of the "pure" problem-driven kind, or as initiated by management needs--seems well justified under the Wilderness Act and by other federal laws that recognize information potential as a basic resource value. But how can research in wilderness best be made compatible with preserving wilderness values? A general principle is that researchers should generally conform to the same restrictions on access, support facilities, etc. as do other wilderness users. These requirements make research in wilderness more expensive and may keep some archaeologists from attempting it. Nonetheless, it seems proper to weight preservation of basic wilderness values above efficiency or comfort in conducting research.

Consumptive research in wilderness need not bear a greater burden of justification than it does on other federal lands, provided site surfaces can be restored sufficiently to preserve the symbolic and aesthetic values of both the wilderness and the archaeological resources. It is not the information potential of archaeological sites that defines wilderness, so some alteration of a site's information potential through research should not pose a challenge to wilderness values. On the other hand, the prevailing conservation ethic in archaeology does demand that non-consumptive research methods be used to the extent they can yield information relevant to research goals, and that excavations leave portions of the archaeological context undisturbed for future work. Also, places such as wilderness, where prehistoric lifeways can be studied in relatively unchanged environments, are becoming increasingly rare. This places an additional responsibility on the archaeologist to conserve wilderness sites.

LITERATURE CITED

- Lipe, W. 1984. Value and meaning in cultural resources. In *Approaches to the Archaeological Heritage*, ed. H. Cleere, 1-11. Cambridge University Press.

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