

Tons of trampling tourists

The Crowded Outdoors
Anxious Armies
Of Vacationers
Are Demanding
More From Nature

Crowd Figures
Rile Readers

TWO DECADES OF RISING ENVIRONMENTAL CONSCIOUSNESS

VISITOR ATTITUDES ABOUT THE ENVIRONMENT

**'The Visitor Experience'
What Do We Really Mean?**

How Americans View the Environment

Americans Are Willing
To Sacrifice to Reduce
Pollution

**Americans pummel parks
with conflicting goals**

We all need to become 'ecotourists,' leaving a place as pristine as it was when we encountered it.



United States Department of the Interior



NATIONAL PARK SERVICE
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IN REPLY REFER TO:

November 8, 1990

Memorandum

To: Park Superintendents
From: Assistant to the Director for Science and Technology
Subject: PUBLIC ATTITUDES ABOUT PROTECTION OF THE ENVIRONMENT AND NATURAL SYSTEMS

Dr. Francis Noe, Regional Sociologist serving the SER and the NCR, together with a colleague from Georgia State University, published a recent article dealing with techniques for measuring public perceptions about environmental concerns as they relate to nature and to the role of man in the protection of natural systems. Specifically, Dr. Noe looked at the results of visitor surveys conducted in five diverse areas over a 10-year period: Cape Hatteras NS; Chattahoochee River NRA; Blue Ridge Parkway; Biscayne NP; and the Cascade Heights area of Atlanta.

These five surveys dealt with a broad spectrum of recreational issues: ORV use at Cape Hatteras; river rafting on the Chattahoochee; visual preferences for scenic vistas on the Blue Ridge Parkway; boating and fishing at Biscayne; and ethnic interests and concerns at Cascade Heights. In each of the five surveys, the visitor questionnaires included a standard set of value judgment questions about the environment and about nature. These questions were designed to measure visitor response in three areas: (a) public concerns for environmental quality; (b) public reactions to man's efforts to use, manipulate and modify the natural environment; and (c) public attitudes about the impacts of growth on ecological systems and the environment.

The central issue in Dr. Noe's study was to determine whether a standard set of twelve value judgment statements can be used systematically and consistently in different recreational settings to characterize environmental perceptions across different populations, different ethnic groups, different age groups, people with different economic or educational backgrounds, etc. As such, this research deals primarily with techniques for measuring visitor responses to environmental questions, rather than with visitor responses per se.

The twelve value judgment statements that were used to evaluate visitor attitudes about man and his relationship with nature are the following:

Standard Environmental/Nature Value Judgment Statements:

1. The balance of nature is very delicate and easily upset.
2. When humans interfere with nature, it often produces disastrous consequences.
3. Humans must live in harmony with nature in order to survive.

4. Mankind is severely abusing the environment.
5. Humans have the right to modify the natural environment to suit their needs.
6. Mankind was created to rule over the rest of nature.
7. Plants and animals exist primarily to be used by humans.
8. Humans need not adapt to the natural environment because they can remake it to suit their needs.
9. We are approaching the limit of the number of people the earth can support.
10. To maintain a healthy economy, we will have to develop a steady-state economy where industrial growth is controlled.
11. The earth is like a spaceship with only limited room and resources.
12. There are limits to growth beyond which our industrial society cannot expand.

Items #1 - #4 deal with concepts that people readily understand and easily relate to. Visitor response to these four statements indicated a strong emotional concern about the fate of nature and the environment. Agreement was high, and the responses were similar across the five sample populations.

Items #5 - #8 deal with public attitudes about subjugating nature to man's designs, and whether the proper role of man in a modern technological society is to control nature and put it in the service of mankind. Visitor response to these statements showed strong inconsistencies among the five sample populations. Some respondents believed man and nature are compatible despite man's control over nature. Others believed that man and nature are incompatible because man dominates the environment and disrupts environmental processes.

Items #8 - #12 deal with issues of industrial growth, economic stability, and limited total resources within the closed ecological system of "spaceship earth". These concepts depend on more technically-based knowledge of ecology and economics and linkages between the two; such concepts frequently are difficult for the public to comprehend and to relate to management actions or environmental consequences. Visitor response to these four statements indicated general agreement among the five sample populations that people need to live within an ecologically tuned economy.

After completing statistical analyses of the responses of some 2250 respondents from the five areas (Cape Hatteras, Chattahoochee River, etc.), the authors concluded that the standard value judgment questions indeed can serve to provide an accurate measure of visitor perceptions about the environment and nature.

Perhaps more important from the perspective of a park manager, visitor responses to the twelve standardized value judgment statements can provide guidance as to some of the kinds of issues that might be addressed or emphasized in environmental education and interpretative programs in order to accomplish resource preservation objectives. For example, on the one hand visitor response to Items #5 - #8 showed sharply differing public attitudes about the proper role of man in using and modifying nature for the benefit of mankind, while on the other hand there was agreement among nearly all of the respondents that man must respect the delicate balance of nature and must live in harmony with nature to survive. One could develop an effective educational and interpretive message around these apparently conflicting positions, starting with the near-universal acceptance amongst park visitors of the importance of protecting the park environment; explaining the irreversible environmental consequences of seemingly minor actions that could modify nature or alter ecological processes; discussing what kinds of behavior we expect from park visitors in natural settings, and why; reviewing the benefits and perhaps the costs of our resource protection programs; and discussing park resource values and how visitors can apply those same values after they leave the park.

In short, although the twelve standardized value judgment statements about nature and the environment were developed to enable sociologists to measure visitor attitudes about environmental concerns, those twelve statements also can help us focus attention on a number of fundamental and sometimes conflicting concepts that are central to the mission of the National Park Service, and around which we can structure effective environmental education messages that visitors can apply both during and after their park visits.



Richard H. Briceland

Dr. Noe's paper is titled, "The New Environmental Paradigm and Further Social Analyses," by Francis P. Noe and Rob Snow. For additional information, Dr. Noe can be contacted at the SERO, FTS 841-4916.