

RECNOTES

RECREATION
RESEARCH
PROGRAM



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(Fees and Charges Handbook, March 1979, U.S. Department of the Interior, Heritage Conservation and Recreation Service)

RECREATION USE MONITORING STUDY

One objective of this study is to test a procedure utilizing campground attendants to generate trend data that would be useful to recreation planners, managers, and researchers. Although the Corps of Engineers already uses a standardized campground receipt form at each of its fee camping areas, the information derived from the receipt is not detailed enough to indicate trend data. It was concluded that a supplementary campsite registration form that could be completed by the campground attendant would be the most effective method of recording

needed information and should be tried on an experimental basis.

During the 1979 recreation season, the Recreation Research Program (RRP), with the cooperation of several Corps' projects, collected supplemental data from registering campers at three campgrounds (Figure 1) within the Recreation Research and Demonstration System (RRDS). The information collected has been compiled and is represented in Table 1.

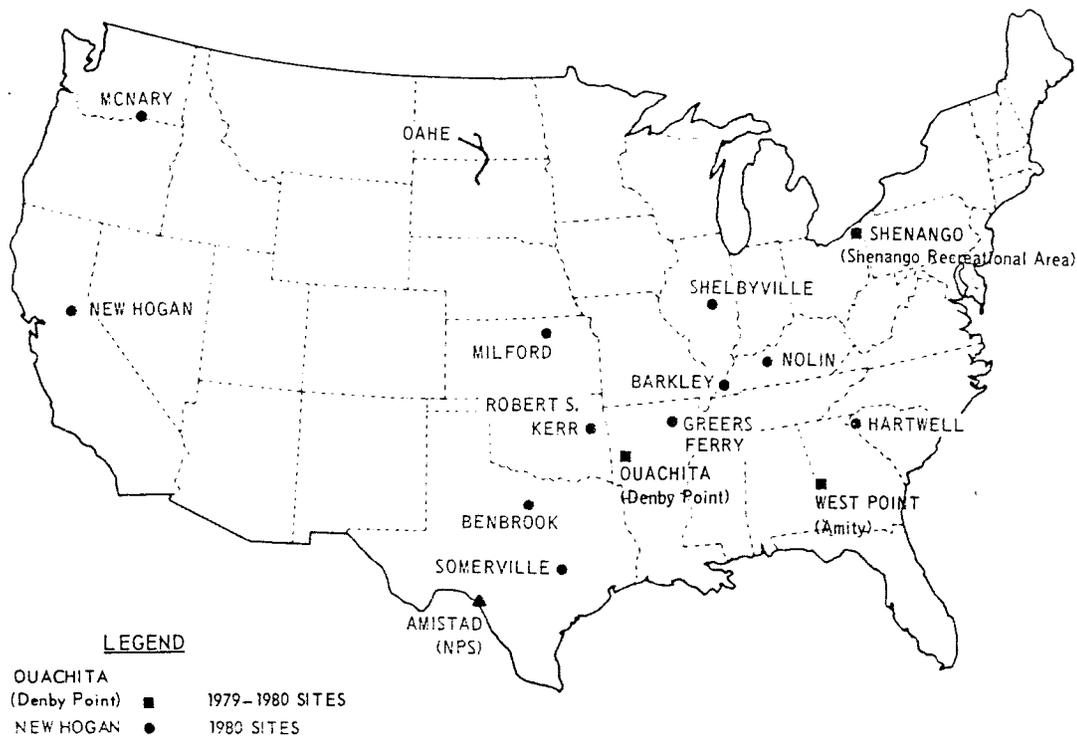


Figure 1. Locations of study sites for recreation use monitoring program

Table 1
 Recreation Variables Monitored at Three Corps Campgrounds
 During the Summer of 1979*

Variables Monitored	Amity		Denby Point		Shenango		Total	
	No.	%	No.	%	No.	%	No.	%
Camping Equipment**								
Tent	283	28	83	56	155	50	521	36
Pop-up camper	140	14	18	12	29	9	187	13
Pickup camper	127	13	38	26	42	14	207	14
Camping trailer	371	37	22	15	58	12	431	30
RV's and vans	145	14	20	13	45	15	210	14
Other Equipment†								
2nd vehicle	328	33	46	31	126	41	500	34
Motorcycle	20	2	5	3	15	5	40	3
Boat	450	45	86	58	65	21	601	41
Bicycle	110	11	12	8	51	17	173	12
			Amity	Denby Point	Shenango	Total		
Camping groups			1,003	149	309	1,461		
Camping visitors			3,397	584	1,293	5,274		
Persons/group, avg.			3.39	3.92	4.18	3.61		
Recreation days spent/group ††			3,983	594	872	5,449		
Length of stay/group (in recreation days), avg.			3.97	3.99	2.82	3.73		
Total recreation days spent ‡			13,846	2,330	3,646	19,462		

* The campgrounds and dates of monitoring were: Amity (West Point Reservoir), 14 May-3 Sept.; Denby Point (Lake Ouachita), 20 June-3 Sept.; and Shenango Phase IV (Shenango Reservoir), 24-30 May, 1-14 July, and 20-22 July.

** Column totals exceed 100 percent because, in many cases, each group had more than one type of camping equipment (e.g., a tent and a trailer).

† Column totals are less than 100 percent because not all groups possessed some type of other equipment.

†† A recreation day is a visit by one person during any portion or all of a 24-hour period. These figures were determined by summing across all groups the number of entire and partial days each group stayed.

‡ For this table, total recreation days spent were determined by multiplying the number of camping visitors by the average length of stay per group.

One disadvantage of the 1979 supplemental data form was the inability to separate groups with more than one type of camping equipment from those with only one. Another problem was that there were not enough categories for all the different types of equipment being brought into the camping areas. For these reasons, the form was revised, and plans have been finalized to expand the study to other fee campgrounds within the RRDS (Figure 1) during the 1980 recreation season. In addition, special computer cards have been developed to code this season's trend data that will allow for greater analysis of the summarizations.

The monitoring program is restricted to documenting recreation trends at fee areas only and is not intended to serve as a mechanism to determine user preference at this time. Thus, most of the information can be obtained from observation. The extra amount of time required of the campground attendant to complete the supplemental registration form is minimal and is not expected to create any serious problems, especially as the attendants become accustomed to its use.

By obtaining user information on entry to campgrounds and rapidly processing the data, shifts in recreational patterns at projects are identified almost as rapidly as they occur. This information will be extremely useful at those projects scheduled for rehabilitation or expansion. Preliminary work has been initiated to develop a methodology to incorporate the visitor-trend data with measurements of human impacts upon the natural and man-made environments within Corps recreation areas. Although the data collected through this monitoring activity will be of value to the field, it will be the products of the research supported by these user data that will be of the most benefit to the Corps recreation and natural resource personnel.

Highlights of the information collected this season will appear in future issues of *RecNotes*.

FIELD INPUT NEEDED FOR NEW RESEARCH EFFORT

The RRP at the Waterways Experiment Station needs to know more about the extent and nature of visitor perception (VP) (interpretive) programming in the Corps of Engineers on a nationwide basis. Through such input, Corps personnel have an opportunity to guide research in such a manner that the results will have direct benefits to field activities.

According to existing Corps regulations, an effective VP program *informs and educates* various

publics with regards to project purpose, local history, and natural features of the area. The goal of such programs is to enlist the aid of visitors in the preservation and enhancement of the environment. In other words, the emphasis is on the use of VP programs as *management tools*. However, existing regulations are vague in their guidelines and standards for developing VP programs; criteria for choosing appropriate themes to interpret are not specified; and methods for the evaluation of existing programs are not provided. Furthermore, project personnel are generally unaware of both successful and unsuccessful VP facilities and programs at other projects.

To help solve these problems, a new work unit entitled "Visitor Perception at Corps Recreation Areas" has been added to the RRP. As a first product of this work unit, Dr. Joseph W. Roggenbuck of Virginia Polytechnic Institute and State University and Dr. Dennis B. Propst of WES are preparing a field guidebook on VP programming. This guidebook will contain six major sections:

- Characteristics of a good interpreter
- Appropriate messages to convey
- Development of interpretive objectives
- Understanding the visitor
- Selection and development of appropriate interpretive media
- Evaluation of programs and facilities

The information contained in the guidebook was obtained from meetings with District and project personnel involved with interpretation, a review of existing literature, and personal communications with interpretive professionals.

Another phase of this work unit is to document the effectiveness and benefits of VP programs and facilities. This is where your input into this work unit enters the picture. We are requesting that both District and project personnel either send or call in information concerning the nature of existing and proposed VP programs and facilities. We are specifically interested in learning of instances where project managers have been able to help solve or reduce management problems (e.g., littering), reduce maintenance costs, or increase public support through the implementation of VP programs. We are also requesting that you tell us about your successes *and* failures in development of various programs and facilities (campfire programs, interpretive trails, powerhouse tours, brochures and other information bulletins, bulletin boards, signs, etc.).

Such information will help accomplish two objectives. First, we will be able to document, on a

case study basis, some of the benefits of using VP programming as a management tool. Second, we will be able to increase our effectiveness as a mechanism for the horizontal transfer of information (Project-to-Project, District-to-District, etc.). Through communications with various Corps personnel, we have found a common complaint: often, one project (District) does not know what another has done in the area of VP programming. Such lack of communications may force a project to "re-invent the wheel" and, in some cases, experience the same mistakes and frustrations that other projects have faced. By knowing of your past successes and failures, we may be able to save you some time and money when you need to solve a problem requiring information which you do not have. We will at least be able to refer you to someone in the field who has experienced a similar problem.

As this information comes in, we will incorporate some of it into future *RecNotes* articles. In addition, some of the information you send us may be used in developing a movie and/or videotape aimed at preparing field personnel for the implementation and evaluation of effective interpretive programs. Please address any comments, questions, or information to Dennis Propst at FTS 542-2199 (commercial 601/634-2199) or A. J. Anderson at FTS 542-3657 (commercial 601/634-3657). Our address is: U.S. Army Engineer Waterways Experiment Station, Environmental Laboratory, P.O. Box 631, Vicksburg, MS 39180.

VPIS

Visitor Perception and Interpretive Service (VPIS) contributions were obtained from various field contacts. Due to space limitations, some articles have been edited. However, more detailed information may be obtained by contacting the individuals who submitted the articles.

FOUR REASONS FOR CORPS INVOLVEMENT IN INTERPRETATION (VPIS)

Legislative Mandates for Interpretation and Environmental Education

The National Environmental Policy Act (NEPA) of 1969 mandated that the U.S. Army Corps of Engineers participate in environmental management as an agency mission along with navigation, flood control, hydroelectric power production, etc. The important point of this NEPA mandate is that environmental management was not to be a secondary program, but was to be a full "add-on"

program, equal to the other Corps missions. The Corps of Engineers environmental management and VPIS programs are found in the following NEPA requirements:

Utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment; . . .

Make available to state, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment; . . .

The Environmental Education Act of 1972 broadly permits and encourages Federal agencies to become involved in interpretations and environmental education activities.

Education and Interpretation as A Tradition of Conservation Organizations

The history of the conservation movement in the United States shows that conservation and education have been closely intertwined almost from the beginning. Environmental education and interpretation figured prominently in the early history of the U.S. Fish and Wildlife Service, National Park Service, U.S. Forest Service, etc., as well as numerous state and private organizations. From the very beginning of conservation efforts in the United States, agencies and organizations have seen environmental education as an effective means for accomplishing conservation and resource management goals. Because of the environmental management mandate of NEPA and other legislation, the Corps of Engineers has joined these agencies as one of the principal conservation agencies in the United States. The Corps is now a part of this tradition.

Interpretation as a Management Tool

The scope and complexities of the Corps of Engineers missions demand that the Corps organize its efforts in the most effective way. Interpretation efforts can be an effective tool for assisting in the solution of many water resource and related problems. If people understand the problems, we are one step closer to motivating them to correct those problems. If people understand the rationale for our resource management decisions, they are more likely to support our efforts. If people are helped to perceive the consequences of their actions, many of the problems may not exist in the first place! An important component of the Corps efforts is to capitalize on a unique ability to show the public what wise resource management is all about. The Corps land and water base provides a tremendous opportunity to demonstrate to America's

increasingly urban public proper, effective resource management.

Executive Emphasis on Interpretation and Environment Education

A further impetus for Corps involvement in interpretation is provided by recent executive, departmental, and OCE initiatives — particularly in the field of public perception, environmental quality, and energy conservation. The administration sees these issues as significant areas of concern for the entire Corps. It recognizes that interpretation and environmental education can be a major tool in meeting Corps objectives by helping to create understanding among the public.

*(Submitted by David Stidham,
FTS 852-5115, Nashville District)*

TIPS ON EXHIBIT PLANNING

Since almost every exhibit or display currently requires that visitors read a message while standing up, the exhibit must be planned in such a way that it will be easily read and understood. Otherwise, the display may be meaningless to or misinterpreted by the viewer.

During the design of a successful exhibit, several decisions should be made about the copy or words that will go on it. These include *content/audience, length, location, style of type, and color.* This article will discuss these factors and present some guidelines for making these decisions.

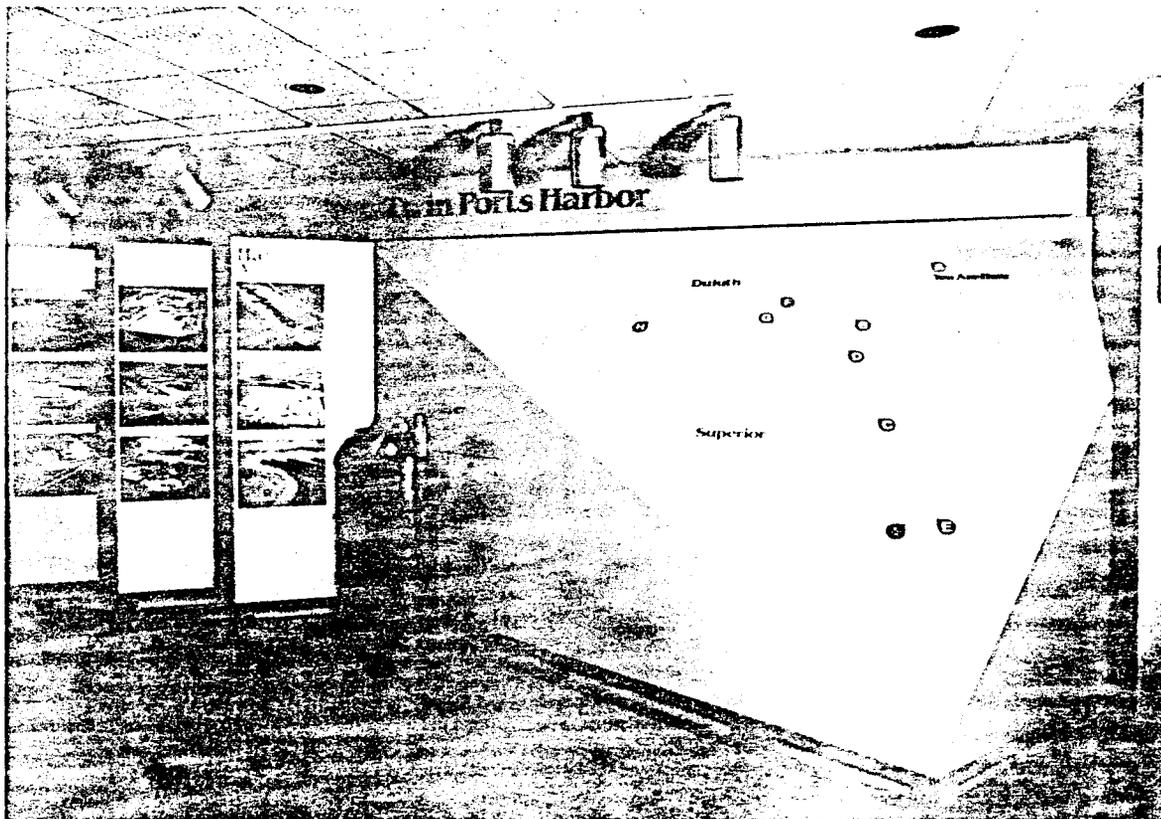
Content/Audience

The content of the exhibit copy is obviously an essential aspect. It is important to determine who the audience will be and then write the copy for that audience — will it be children, general public, or enthusiasts?

One successful method of presenting information on exhibits is to use three categories or levels. The first category is the title or headline, which conveys the subject matter or name of the exhibit. The headline is usually large enough to be read at a glance from across the room

The second category of information gives the visitor general information or summarizes the story of the exhibit. It is located at eye level or at a very comfortable reading level and can be a sentence to a paragraph long. No previous knowledge is needed to understand or appreciate this second level of information.

The third level of information is detailed data



Twin Ports Harbor display

such as statistics, scientific names, dimensions, and references. Visitors who read this level will often be enthusiasts about the subject. This third level can be several paragraphs in length, or it can be in the form of charts. It has smaller, less bold type size than the second level, and it does not need to be as conveniently located on the exhibit.

Length

The overall length or volume of exhibit copy is important. If it is too long, many visitors will leave without reading the copy. Several pages of information could be presented in a handout or fact sheet.

The length of lines is important. If they are too short, the visitor will feel like he/she is at a tennis match. Too long, and the visitors lose their place when switching lines. The ideal length is an alphabet and a half or about 40 letters. Think about it a minute. One of the reasons newspaper columns are narrow is the ease of reading.

Location

The location of the copy on the exhibit can be as important as what it says. Too high, and only basketball players will be able to read it. If the copy is too low, you will have visitor complaints of lower back pain. Usually, location of 3 to 5 feet from the floor is a comfortable level. As a viewing aid, some exhibits have steps for youngsters to stand on.

Style of type

The style of type face affects the readability of the copy. Serifs on a type face are generally easier to read. A serif is a light line or stroke crossing or projecting from the end of a mainline or stroke in a letter.

Example:

READ: without serif

READ: with serif

Type with serifs is used in beginning reading books and in newspapers because of its readability. However, there are a multitude of type faces to choose from as readability is only one factor in choosing the type face.

Color

The color of the copy and the contrast with the background affect readability. Visitors are accustomed to dark on light. Dark on dark (such as red on black) can be nearly impossible to read. Two colors with the same value or no contrast will cause the letters to vibrate.

In conclusion, several items should be considered when deciding what copy to use on the various areas of an exhibit. If the visitors will not or cannot read the exhibit, there is no point in designing or building it.

*(Submitted by Valerie Burlingame,
FTS 725-7550, St. Paul District)*

NEW RRP RESEARCH EFFORT BEGUN

The Recreation Research Program at Waterways Experiment Station, Vicksburg, Mississippi, was recently authorized to begin a new work unit entitled "Visitor Perception at Corps Recreation Areas." Among other objectives, WES will attempt, through a series of field manuals, to provide field personnel with various information such as state-of-the-art design criteria, guidelines, and objectives for the development of visitor perception and interpretive services programs. This research effort will stress a water resources theme. For more information, see "Field Input Needed for New Research Effort."

RECENT PUBLICATIONS

LaPage, Wilbur F., Chairman. 1980. *Proceedings, 1980 National Outdoor Recreation Trends Symposium*. Northeast Forest Experiment Station, Broomall, Pennsylvania (USDA For. Serv. Tech. Rep. NE-57). Volume I is available now. Volume II will be available at a later date.

From the Field

PUBLIC INVOLVEMENT IN THE RUSSELL MASTER PLAN

Many Corps of Engineers District Offices across the country have found public workshops to be useful in obtaining meaningful public involvement in the planning process. When these workshops are combined with a systematic feedback of information, participants feel their voices are really being heard.

The Savannah District Office, in cooperation with the States of Georgia and South Carolina, recently held a series of workshops on the Richard B. Russell Master Plan for Recreation Development. Prior to the workshops, planners of Savannah District met with their counterparts from each state to determine a course of action for public participation in the planning process for the Master Plan.

The outcome of this meeting was selection of a variation on the *Nominal Group Technique*, which is a judgment-talk-judgment procedure wherein individual participants record their judgments or thoughts about a specific subject, such as major concerns relating to recreational and resource development. These individual judgments are then given a priority rating (1-5) that is shared and discussed with other group participants. Following the discussion, a final independent judgment on all concerns is recorded by the participants. Through this type of workshop, individual participants gain a sense of contributing to and, hopefully, learning from the planning process.

The groups involved — environment, development, and planning oriented — were selected for the specific results desired. Participants included individuals knowledgeable of the broad concerns within these groups.

Following the workshops, the planners provided initial feedback of information by compiling and distributing a summary of the workshops to the individual participants. Results of the workshops formed the nucleus of the resource-use objectives proposed in the Richard B. Russell Master Plan. Later, executive summaries of the draft Master Plan were sent to the workshop participants and others for review prior to scheduled public meetings. This continued information feedback was responsible, in

part, for the general successes of the entire public involvement segment of the Richard B. Russell Master Planning process.

(Submitted by Dennis Lindemeier,
FTS 248-5830, Savannah District)

SAVANNAH USES COMPUTER FOR MASTER PLANNING

With one updated and two initial master plans on line for completion within a two-year period, the Savannah District initiated assemblance of a computer-assisted data base for inventorying and assessing the natural resource and land-use features of the Clark Hill, Russell, and West Point project lands. These studies were completed with assistance from the Georgia Department of Natural Resources and ERDAS, Inc., of Atlanta. The qualitative approach used in these investigations was designed to support planners and managers in preparation of the master plans.

The geographic coordinate system chosen for these studies included 18 data variables encoded at a cell size of 4.889 acres for each of the data items. This system is easily compatible with the existing USGS quadrangle maps at the scale of 1:250,000 or 7.5 minutes.

The 18 data variables included in the data base are shown in Table 1.

Table 1
Data Variables

Transportation and utilities	Soil Types
Vegetation — land cover	Permeability: layer 1, layer 2, layer 3
Slope	K-Factor — surface
Historic and archaeological sites	Depth to water table
Surface water type	Depth to bedrock
County boundaries	USFS boundary
Water quality management and watershed boundaries	Wildlife management areas
Reservation and project boundaries	Land use — general

Once the data base inventory was encoded, specific analyses were produced for preferred site locations