

VOL R-78-2

# RECNOTES

RECREATION  
RESEARCH  
PROGRAM



MAY 1978



## U. S. ARMY CORPS OF ENGINEERS INFORMATION EXCHANGE BULLETIN

### PROGRESS REPORT ON USER INFORMATION SYSTEM

Midwest Research Institute (MRI) is developing and evaluating conceptual alternatives for a User-oriented Recreation Visitation Information System under contract with the Recreation Research Program (see RECNOTES, Vol R-78-1). The objectives of the work are to determine and describe: (1) information and data pertaining to recreation visitors needed to support planning, design, management, and research; (2) the manner and frequency of data collection; (3) the type of data analyses needed on a routine basis; and (4) conceptual alternatives for storage, retrieval, and dissemination of data and information. MRI is also to address the administrative aspects of alternative data collection and dissemination proposals, such as personnel requirements, costs, and organizational structure.

#### Field Survey

MRI initiated the research effort by visiting with personnel from the Waterways Experiment Station (WES), the Office, Chief of Engineers (OCE), and the Institute for Water Resources (IWR) to discuss information needs and data collection problems. Different Divisions, Districts, and projects were then visited by MRI researchers to discuss data collection and dissemination problems with planners and managers responsible for day-to-day decisionmaking. Input from these individuals was considered essential to the development of a comprehensive recreation information system. Discussions were held with personnel from a total of 5 Divisions, 13 Districts, and 33 projects.

#### Interim Results

Results of the discussions with Corps personnel as well as computerized information searches were summarized by MRI in an interim progress report. The report provides an overview of initial study findings which were reviewed by personnel from WES, OCE, and IWR to provide direction to MRI for the remaining contract effort. MRI's initial conclusions regarding data quality and initial recommendations regarding overall data needs and parameters for an improved system are summarized below.

Existing data quality problems. The following were identified by MRI during discussions with field personnel as contributing to existing visitation data quality problems: (1) lack of a standardized approach for data collection; (2) lack of a standardized definition for a recreation visit; (3) ranger grades and resource allocations to projects often based on visitation levels; (4) inconsistency in reporting of visitation for areas managed by non-Corps agencies; (5) specific measurement problems (e.g. measurement of dispersed visitation); and (6) insufficient staffing, especially at the project level. Virtually all project personnel contacted indicated that limited staffing was preventing them from providing more accurate visitation estimates. MRI's research staff concluded that project offices are in general doing the best possible job to obtain useful and accurate data under existing circumstances.

Existing recreation participation patterns. In order to compare projects, evaluate changing participation patterns, and track the general growth of recreation use on Corps properties, MRI recommended that the system contain information on the number of visits to projects and sites, activities in which the public participates, and the origin/destination of users. MRI suggested that the Corps continue to record visits to projects and sites in terms of recreation days, but include enough information in the survey so that factors for converting the estimates to visitor days can be developed.

User preferences. Recreation use patterns are continually changing. It is important, therefore, that information concerning user preferences be gathered in order to develop and maintain an adequate information system. MRI recommended that at a minimum such information should include: what people want; what people need; public willingness to pay operation and maintenance costs; user satisfaction with Corps facilities, management, etc.; and public preferences with regard to interpretive facilities and programs.

Other information needs. Other information identified by MRI that could assist the Corps in its recreation functions relates to: leisure industry sales and developments; land use changes and impacts; impacts on local economies; and relationships between demographic characteristics and user participation, preferences, motivations, and satisfactions. New developments and changes in trends in the leisure industry do impact on Corps projects. One trend already noted in the Midwest, partly because of increased sales of vans and tents, is that Corps projects are experiencing an increase in tenting as opposed to large recreational vehicles requiring full facility hookups. Tracking of specific data elements such as equipment sales on an annual basis could provide valuable information on potential impacts at Corps recreation areas. Corps planners, particularly economists and those working on project feasibility, indicated to MRI a need for information on the impact of Corps recreation developments on land values and on local economies. A need was also expressed for additional information as to relationships between demographic characteristics and user participation, preferences, and satisfactions.

#### Ongoing Work

MRI is currently addressing the problem areas and issues described in the interim report. Of special concern is how information can be efficiently and effectively disseminated to recreation planners and managers once data are collected and processed. A final report will be prepared containing a discussion of improvement of visitation data quality, conceptual development of a recreation information system to serve Corps-wide planning and management needs, alternatives for implementing study findings, administrative aspects (e.g., personnel requirements) of implementing alternatives, and long-range considerations and implications. In addition MRI is to prepare a user manual describing a standardized procedure for collecting recreation visitation data. Both the final report and the user manual will be published this summer. Additional information as to study findings and distribution of the final report and user manual will be provided in future issues of RECNOTES.

#### FROM THE FIELD

##### St. Louis District Youth Employment Programs

The St. Louis District will participate in the Youth Conservation Corps (YCC) Program in 1978 at Lake Shelbyville, Illinois. Objectives of this program, which is authorized under PL 93-408 and jointly administered by the Departments of Interior and Agriculture, are to provide gainful employment for youths age 15 to 18, accomplish needed conservation work on

public lands, and develop an understanding and appreciation of the nation's natural environment and heritage. The Lake Shelbyville YCC Program will involve 30 youths for eight weeks in the development of an environmental study area. The resident camp will be managed under contract with an area college and will consist of 30 hours of work and 10 hours of environmental education weekly.

The District will also participate in the Young Adult Conservation Corps (YACC), authorized by Congress under PL 95-93 and administered under an agreement between the Departments of Labor, Interior, and Agriculture. Youths age 16 to 23 who would not otherwise be employed are eligible for the program and would be involved in conservation work on public lands. The environmental education aspects included in the YCC Program do not apply to the YACC Program. For further information contact Robert Davidson at St. Louis District at FTS 278-2831 or Commercial (314) 268-2831 or Kirby Kline of the Department of the Interior at (202) 343-5951.

### Lake Ouachita Geo-Float Trail

On a typical sunny summer morning at Lake Ouachita, it is common to see folks launching their boats and heading out on the blue waters for a day of boating, skiing, fishing, or sightseeing. But this summer, things will be different. You might see a family boarding their boat, not with a rod and reel or a pair of skis in hand, but with a trail booklet, heading for Zebra Rock, Checkerboard Point, or Submarine Slide. These are just a few of the stops on the Ouachita Geo-Float Trail, a self-guiding geological trail for boaters.

Lake Ouachita is a Vicksburg District project located in the heart of the Ouachita Mountains, northwest of Hot Springs, Arkansas. About 250 to 300 million years ago, forces within the earth's crust pushed this region, once 150 miles wide, into an area just 80 miles in width. Today, geologists from around the world come to view and study the complex system of faults, folds, and fractures which were created during the uplift of the Ouachitas.

This summer boaters will also be able to see how geology has influenced local history, types of vegetation, and natural fish shelters by following the Geo-Float Trail. A map will be provided in the trail booklet to aid in navigation, and specific trail stops will be marked by lettered buoys. For each stop the booklet will provide a description of the effects of geology on the landscape and its impact on human use of the lake.

Before the trail was made available to the public, a considerable amount of research and planning was required. The Lake Ouachita management staff contacted the Arkansas Geological Commission for technical assistance in determining and describing the exact geological resources of the lake. Charles G. Stone of the Commission and Boyd R. Haley of the U. S. Geological Survey were eager to describe the geologic history of the area, pointing out unique features along the lake's shoreline and explaining the formation of these features. With this information, specific trail stops were pinpointed for inclusion along the Geo-Float Trail.

Selection of interpretive media was the final step in planning the trail. The fluctuation of the water level of the lake (10 to 15 feet annually), the fragile nature of some of the geological features, and the trail length (approximately 10 miles) dictated the type of media to be used. By following the stops marked with lettered buoys corresponding to the text in the trail booklet, visitors will be able to find and explore specific geologic features while remaining in their boats. This will not only allow the visitors to find the trail stops even though the water level is constantly fluctuating, but will also minimize damage of the fragile resources.

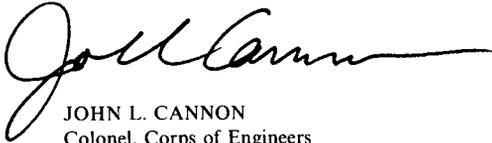
The Ouachita Mountains are one of the most geologically complex regions in the world. By traveling the Ouachita Geo-Float Trail, visitors can experience a unique recreational opportunity and gain a better understanding and appreciation of the complex geology of the area. So this summer when you see folks at Lake Ouachita climbing into their boats with a trail booklet in hand, you'll know that they're not only thinking of skiing or fishing, they just may have rocks on their minds. For further information contact Mr. Frank Walker, Resource Manager, Lake Ouachita, Commercial (501) 767-6943.

RECENT PUBLICATIONS

Terry D. Hand and Randall R. Williams, The Role of Sewage Lagoons at Corps of Engineers Recreation Areas, Miscellaneous Paper Y-77-5, November 1977, U. S. Army Engineer Waterways Experiment Station, P. O. Box 631, Vicksburg, MS 39180.

This survey report was prepared to assess the role of Corps of Engineers recreation area sewage lagoons in light of recent technology and current and future Corps problems and needs. A review of the literature was conducted to identify design, operation, and up-grading methods that may be applicable to the special loading problems and other circumstances characteristic of recreation area lagoons. Concurrently, a survey was conducted to establish the geographic distribution and the design and performance successes and failures of the more than 200 Corps recreation area lagoons nationwide. Steps are recommended for improving lagoon waste treatment at recreation areas based on current knowledge, and areas of needed research are identified.

This bulletin is published in accordance with AR 310-2. It has been prepared and distributed as one of the information dissemination functions of the Environmental Laboratory of the Waterways Experiment Station. It is primarily intended to be a forum whereby information pertaining to and resulting from the Corps of Engineers' nationwide Recreation Research Program can be rapidly and widely disseminated to OCE and Division, District, and project offices as well as to other Federal agencies concerned with outdoor recreation. Local reproduction is authorized to satisfy additional requirements. Contributions of notes, news, reviews, or any other types of information are solicited from all sources and will be considered for publication as long as they are relevant to the theme of the Recreation Research Program, i.e., to improve the effectiveness and efficiency of the Corps in providing recreation opportunity at its water resource development projects. This bulletin will be issued on an irregular basis as dictated by the quantity and importance of information to be disseminated. Communications are welcome and should be addressed to the Environmental Laboratory, ATTN: A. J. Anderson, U. S. Army Engineer Waterways Experiment Station, P. O. Box 631, Vicksburg, Mississippi 39180, or call AC 601, 636-3111, Ext. 3657.

  
JOHN L. CANNON  
Colonel, Corps of Engineers  
Commander and Director



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