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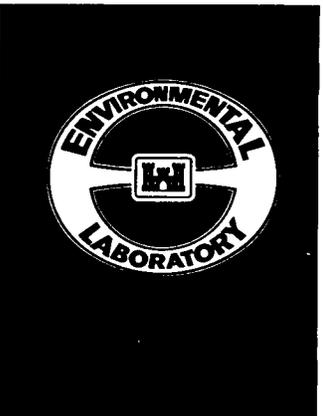
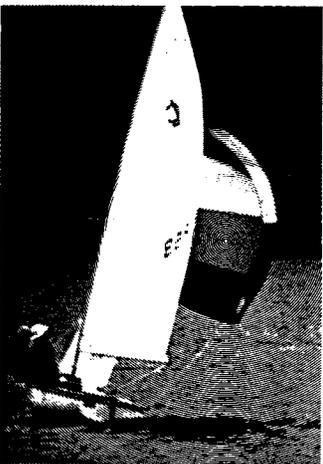
RECNOOTES

NATURAL
RESOURCES
RESEARCH
PROGRAM

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INFORMATION EXCHANGE BULLETIN

MAY 1985



Land managed under conditioned lease

NATURAL RESOURCE MANAGEMENT IN THE OMAHA DISTRICT

*Natural Resource Management Branch
Omaha District*

The Omaha District manages over 1.9 million acres of land and water. This stewardship responsibility is accomplished with a relatively small permanent staff that averages one person per 56,700 acres. A continuous search for more efficient and productive resource management techniques is a necessity. During the last few years, significant gains have been made in achieving management objectives.

The Omaha District includes 6 major dams and reservoirs built on the Missouri River and 20 smaller reservoirs. The shoreline of the combined projects is over 1000 miles longer than the entire coastline of the lower 48 states. All of

the major main stem reservoirs (Table 1) and 4 smaller reservoirs are under direct Corps management. The remainder of the smaller lakes are leased to state and local government agencies for operation and maintenance.

MANAGEMENT PROGRAMS

Outgrant Arrangements

Outgrant arrangements with state agencies are a tool for achieving natural resource management objectives. These agencies are helping fence Corps projects, plant food plots, and establish shelterbelts.

Table 1. Major Main Stem Reservoirs in Missouri River System

<i>Reservoir</i>	<i>Remarks</i>
Fort Peck Lake, Montana	Abundant wildlife around lake. Project surrounded by 1/2-million-acre Charles M. Russell National Wildlife Refuge
Lake Sakakawea, North Dakota	Successful tree-planting and salmon-stocking programs
Lake Oahe, North Dakota/South Dakota (231 miles long)	Emphasis on multispecies management; supports very good walleye fishery frequently mentioned in national magazines.
Lake Sharpe, South Dakota	Important migratory bird rest area and important habitat area for prairie chickens
Lake Francis Case, South Dakota	Supports large winter populations of bald eagles; project lands are part of Fort Randall Eagle Roost, a Registered National Landmark with US Department of Interior
Lewis and Clark Lake, South Dakota/Nebraska	Corps of Engineers and States of South Dakota and Nebraska studying ways to increase paddlefish population.

Conditioned Leases

One of the most successful means used to compensate for the lack of money and manpower is conditioned natural resource management leases. These leases require the lessee to provide resource work in lieu of rental fees in order to obtain specific management objectives. Utilizing this technique, areas are being fenced; erosion is being controlled; food plots and nesting cover are being provided for wildlife; and noxious weeds are being controlled.

When a town was relocated at Lewis and Clark Lake, an aggressive conditioned lease program provided food plots and nesting cover for wildlife.

Fisheries Management

Fisheries management includes providing brush and tire spawning structures in bays, using spalls around submerged dikes, and adding smaller aggregate to rip-rapped areas.

Salmon have been introduced in Fort Peck Lake, Lake Sakakawea, and Lake Oahe; and imprint stations are being used to help return spawning salmon to selected sites for egg collection and for anglers. A gravel permit at Lake Francis Case was conditioned so that, when extraction was complete, the contractor provided a spawning bed attractive to sport fish.

When lake levels are low, exposed mud flats at some reservoirs are seeded with forbs to subsequently provide spawning substrate and habitat for fry and forage fish. Additionally, forage fish that are adapted to man-made reservoirs are being introduced to support the walleye and northern pike fisheries.

Wildlife Management

Lake Sharpe is working with a neighboring Indian tribe to accomplish wildlife conservation goals. At Fort Peck Lake, the staff has worked with the US Fish and Wildlife Service to reintroduce elk and bighorn sheep to their native range.

Staffs at smaller projects also have ambitious programs. At Bowman-Haley Lake and Pipestem Lake, park managers have successfully managed for upland game habitat and are actively working to restore the giant Canada goose to its historic range. Populations have been established at both lakes, and geese are using the nesting platforms that were provided.

Vegetation Management

The District is funding several studies to learn what plantings will grow best on unstable and sandy lakeshores. Desirable bay areas are fenced to allow shoreline trees and grasses to propagate.

Another management technique being used is controlled burning. The encouraging results are native grass restoration and weed control.



Controlled burning for vegetation management



Tree-planting project at Lake Oahe

Tree Planting

A tree-planting program at Lake Oahe is providing excellent winter habitat, and recently a National Arbor Day Award was presented to Lake Oahe management for successfully planting more than 1/2-million trees. At Lake Sakakawea, over 700,000 trees have been planted in the past few years.

The District-wide tree-planting program presents an interesting challenge because water is a limiting factor for tree growth on the Great Plains. In extremely dry areas at Fort Peck Lake, tree cuttings are planted at a depth of 20 to 40 ft. The bark acts as a wick to transport moisture to the growing portions of the tree. A no-till/chemical-plant-control program is successfully used with evergreen trees.

A twin-row tree planter was developed to plant two rows of trees a few feet apart. This reduces the



Beetles used to control musk thistles

time spent in the field by half and increases tree survival. Another existing tree planter was modified to remove a strip of sod to create a plant/seed-free furrow. The deep furrow helps collect rain and reduces weed competition for newly planted trees.

Biological Pest and Weed Control

Preventing pesticide contamination of reservoirs is a major concern. Using biological controls is helping to reduce pesticide use around the lakes and saves O&M money that would otherwise be spent on expensive chemicals. Beetles and fungus are being used successfully to control musk thistle infestations, and mosquitoes are being controlled with bacteria.

SUMMARY

The permanent natural resource management staff of the Omaha District is involved in both the recreation and parks and the environmental and land management aspects of a complete natural resource management program. They continue to look for innovative approaches to natural resource management.

The District's goals are aimed at continued improvement in both the quantity and quality of natural resource management. Efficiency and innovation will be stressed as key elements in accomplishing these goals. Omaha District invites and encourages other districts to share new methods and practices that they are utilizing toward this end.

For further information about the programs mentioned in this article, please contact the Omaha District, Natural Resources Management Branch, FTS 864-4139 or commercial (402) 221-4139.



The Volunteer Program aids project managers in meeting budget and manpower goals while continuing to provide visitors with quality recreation experiences. An example of a volunteer activity, assisting with boat inspection at Enid Lake, Mississippi, is shown above. The experiences of the Vicksburg District are described in the following article.

VOLUNTEER PROGRAM THRIVES

*Julie B. Marcy
Natural Resources Management Branch
Vicksburg District*

The Volunteer Program was authorized by Public Law 98-63 on 30 July 1983. Under this law volunteers can perform duties similar to those of regular employees, but they cannot be used to displace government employees. The Vicksburg District uses volunteers in a number of categories such as fish and wildlife management, trail and campground maintenance, interpretive services, and office work. Special group activities, such as the adoption of a motorcycle trail, are also available. The District encourages and establishes reciprocal agreements with volunteers so that scouts can earn merit badges and students can earn course credit.

BECOMING A VOLUNTEER

The program is publicized through flyers and brochures posted at the projects, newspaper articles, and recruitment sessions with civic clubs and schools. An individual or group can get specific information by contacting a project office using the program. In the Vicksburg District, the projects include:

Mississippi — Arkabutla, Enid, Sardis and Grenada Lakes

Arkansas — DeGray Lake, Lake Ouachita, and Lake Greeson

Louisiana — Monroe Navigation Field Office

Each interested person or group is asked to complete an application to determine skills and availability. Should the project need the skills being offered, an agreement is signed and the work begins. Volunteers under 18 must have parental consent before beginning to work.

VOLUNTEER PROVISIONS

The Corps provides the materials, equipment, and facilities needed to perform volunteer work. Each volunteer is given a nametag and a red baseball cap with a volunteer patch and is issued a reusable hard hat and an armband. Reimbursement for some incidental expenses is authorized on a limited basis as is free camping. For instance, free camping may be offered as necessary to volunteers who provide 20 hours or more of service per week and who abide by the provisions of Title 36.

RECOGNITION

Upon completion of a volunteer agreement, participants receive an attractive certificate of appreciation. The Public Affairs Office provides periodic articles to local newspapers that describe the contribution of the volunteers.

PROGRAM ASSESSMENT

Since initiating the volunteer program in the spring of 1984, the Vicksburg District has had 453 volunteers. In addition, approximately 2000 persons have assisted in annual cleanup operations at the various projects. Volunteers have ranged in age from Cub Scouts and Brownies to senior citizens.



Volunteer couple modeling their baseball caps



Oklahoma State University students who received course credit for managing a timber sale (left) and marking timber (right) at Lake Ouachita, Arkansas

Measuring, marking, and thinning timber; planting trees and wildlife food crops; breaking beaver dams; and construction of fish habitat are examples of natural resources management work performed. Volunteer maintenance efforts include collecting litter, dragging ballfields, and adopting a motorcycle trail. Administrative assistance has been in the form of clerical help and preparing Woodsy Owl packets for distribution. Volunteer support has also been used in providing visitor information and interpretive services and wearing character costumes for safety programs. Altogether, these efforts have saved approximately 1612 man-hours and \$16,120 thus far.

SUMMARY

Essentially, the Vicksburg District volunteer program started off on the fast track and hasn't slowed down. The program will be continued because of the many benefits it produces. Aside from the important manpower and monetary savings, the real value of the volunteer program is getting the public directly involved in Corps operations and improving public relations.



VISITOR CENTER OPERATIONS CONTRACT SUCCESSFUL

*Julie B. Marcy
Natural Resources Management Branch
Vicksburg District*

The 1984 recreation season marked the beginning of a new and productive experience for the Vicksburg District when a contractor began operation of the Class B visitor center at the Grenada Lake Field Office. The contract was seen as the means of continuing to provide quality recreation experiences to project visitors within constraints caused by tight money and manpower restrictions. Contracts were already being used at various projects for services including grass cutting, clean up, boundary line maintenance, wood duck box maintenance, and tree planting.

Grenada Lake, located in northern Mississippi, receives an average of 3 million visitors each year. The visitor center contains a variety of interpretive media (audiovisual, poster, and diorama exhibits) on the media subjects below:

- Project Need
- Corps Involvement
- Grenada Dam
- Yazoo Basin (location of project)
- Operation of the Project
- Civil War (relict redoubts located on the project)
- Choctaw Indians (early inhabitants of the area)
- Upland Wildlife and Habitat
- Bottomland Wildlife and Habitat
- Meeting the Corps Challenge

Completing the interpretive message is an 18-minute three-screen multimedia presentation that

(Continued)

LITTLE ROCK DISTRICT EMPLOYEE RECEIVES NATIONAL HONORS

Carl Garner, resident engineer of the Greers Ferry project at Heber Springs, Arkansas, was decorated for Exceptional Civilian Service, the highest honorary award granted by the Army to civilian employees. Secretary of the Army John Marsh presented the decoration to Garner on 7 December 1984 at ceremonies at the Pentagon. Secretary Marsh cited Garner for his outstanding development, management, and operation of the Greers Ferry project, "making it one of the Corps of Engineers' top projects and a showcase of the Army's service to the public through its Civil Works program."

While in Washington, Garner attended the Keep America Beautiful (KAB) Association annual awards luncheon. There he represented the Greers Ferry Lake and Little Red River Cleanup, which he started in 1969 and which was honored as a pioneer beautification program as well as a model for the planned KAB Public Lands Day program.



Secretary of the Army John Marsh (right) presented Exceptional Civilian Service award to Carl Garner as MG N. G. Delbridge, Jr., Deputy Chief of Engineers, looked on.



Grenada Lake visitor center

describes the building of Grenada Dam and the recreation facilities and activities at Grenada Lake. Approximately 33,000 visitors go through the visitor center each year.

CONTRACT DESCRIPTION

The visitor center is open 7 days a week from 0900 to 1200 hours and from 1300 to 1700 hours. During these hours, the contractor is required to

staff the center with one or two individuals 21 years of age or older. Responsibilities of the contractor are diverse: operating the information desk where the contractor greets each visitor and provides information about the visitor center, lake facilities, upcoming special events and general travel information; keeping a daily record of visitation; maintaining a guest register and daily log; and operating the complex theater program and other audiovisual programs. The contract employees wear a uniform consisting of a name plate, maroon tie, white shirt or blouse, gray sweater or blazer, and gray trousers or skirt.

PROGRAM ASSESSMENT

The Vicksburg District considers that the operation of the visitor center at Grenada Lake during the 1984 season was a success. The contractor was extremely interested in doing a good job, and he hired reliable and efficient employees. The contractor, Denis Fitzgerald of the Shamrock Company, was selected as Ambassador of the Month in June 1984 by the Grenada County Chamber of Commerce. Selection for the award is based on a person's courtesy, friendliness, and helpfulness to visitors to the community.

The program's success is further illustrated by the increase from one contract bid for the 1984 season to six for the second advertisement.



Contractor employee greeting visitor

Regardless of the initial success, the District realizes that there could be problems. It might be difficult for a contractor to find qualified personnel in the small towns and rural areas near remote projects, and time is required for an employee to learn facilities well enough to assist visitors. In addition, the Resource Manager must dedicate sufficient time to manage the contract and to evaluate contractor performance.

SUMMARY

The successful operation of the Grenada Lake visitor center by contract during the 1984 recreation season demonstrated that such a contract could be used to meet goals of quality recreation experiences within budget and manpower constraints.

☆☆☆☆☆

UPDATE

John Burns (DAEN-CWP-D) has replaced Alex Otto as the NRRP alternate technical monitor.

Frank Star (NCSPD-ES) has replaced James Holleran as the NRRP point of contact in the St. Paul District.



NATURAL RESOURCES RESEARCH PROGRAM

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 Natural Resources 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 Natural Resources Research Program, i.e., to improve the effectiveness and efficiency of the Corps in managing the natural resources while providing recreation opportunities at its water resources 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 welcomed and should be addressed to the Environmental Laboratory, ATTN: A. J. Anderson, U.S. Army Engineer Waterways Experiment Station, P.O. Box 631, Vicksburg, MS 39180-0631, or call AC 601, 634-3657 (FTS 542-3657).

ROBERT C. LEE
Colonel, Corps of Engineers
Commander and Director

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