

AN INDEXED AND ANNOTATED BIBLIOGRAPHY
ON THE ECOLOGY AND MANAGEMENT OF THE
NATURAL RESOURCES OF YELLOWSTONE NATIONAL PARK

Walter H. Eifert
Thomas A. Wesche
University of Wyoming
Laramie

Objectives

The primary goal of this investigation is to provide the resource managers of Yellowstone National Park with a method to rapidly identify, locate and obtain Park-related natural resources information. To accomplish this goal, the principal objectives of this study are as follows:

1. By means of literature reviews, computer searches, and extensive communication with key personnel representing a variety of agencies, institutions, and other entities, systematically locate and document both published and unpublished Yellowstone National Park natural resources reports. The principal categorical areas investigated will include the physical, biological and social sciences disciplines.
2. Compile, categorize and key-word bibliographic information obtained under Objective No. 1. These data will then be used to generate a FAMULUS-based computerized bibliography utilizing the University of Wyoming's Cyber Computer System.

Utilization of the FAMULUS information storage and retrieval package will facilitate rapid updating capability, provide Park researchers with an expedient, low cost technique to locate specific natural resources information, and identify possible data gaps in those Park areas where deficiencies may occur.

Methods

Phase I. The approach taken to ensure complete documentation of all pertinent Park reports included extensive library and commercial literature searches, contacts with key personnel representing federal, state and local agencies and universities located in the Rocky Mountain Region, and the utilization of existing FAMULUS databases generated for other regional Park Service facilities.

To ensure organizational clarity and provide a means to electronically transfer information to NPS facilities in possession of a FAMULUS database, all data obtained from the above sources are standardized through utilization of the following FAMULUS format:

YELLOWSTONE NATIONAL PARK
NATURAL RESOURCES BIBLIOGRAPHY

Format Card 1984

AUTH - Author of publication
SORT - Author rearrangement
YEAR - Year of publication
TTTL - Complete title of publication
SRCE - Publisher
SUMM - Summary of abstract
DESC- -Descriptors of keywords
LOCN - Physical location of document
GEOG - Geographic area covered by report

During this process, several key-words are assigned to each citation to enhance retrieval capability. All assigned key-words are obtained from standardized lists of thesauri of retrieval terms. In addition, each citation to be included in the database is geographically formatted following Yellowstone National Park criteria.

Upon final verification of format, all corrected citations are entered onto the Yellowstone National Park Natural Resources database. Subsequent test runs are conducted at 500 citation intervals for editing purposes and database retrieval reliability checks.

Phase II. Phase II methodology includes the continuance of the documentation, standardization, and data entry procedure listed in Phase I with the addition of an abstract to those citations selected by Yellowstone National Park personnel in the review of the database. Those reports selected for abstraction will be secured from the informational sources identified in Phase I of this study.

Results

Yellowstone National Park natural resources data has been secured from Park-area sources. Documentation of the Yellowstone National Park Research Library and U.S. Fish and Wildlife Service files at Park Headquarters is complete with data entry well underway.

Commercial database searches and contact with numerous regional sources of Yellowstone National Park information have been conducted.

To date, bibliographic data on approximately 10,000 Yellowstone National Park natural resources reports have been collected. Of this total, 4,500 citations have been standardized and entered onto the database. The current project focus is on the continuance of data entry and standardization procedures.

Conclusions

The standardization of FAMULUS specific procedures during past studies has significantly increased the data entry/editing process. Present expectations center on providing Yellowstone National Park with a completely operational database under Phase I criteria by the close of the 1984 project year.

An end product in the form of a database "Users Manual" is currently being constructed. In addition, a contact list identifying major sources of Yellowstone National Park natural resource information will be provided to ensure expedient updating capability.