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THE BIBLIOFILE CONNECTION: FROM MANUAL TO AUTOMATED

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Abstract

Automation using commercially-available library programs: BiblioFile (The Library Corporation) and Circ+ (Follett). The needs assessment, conversion effort, and equipment required to automate a small (30,000 item) special research library are reviewed and the programs overall success evaluated.

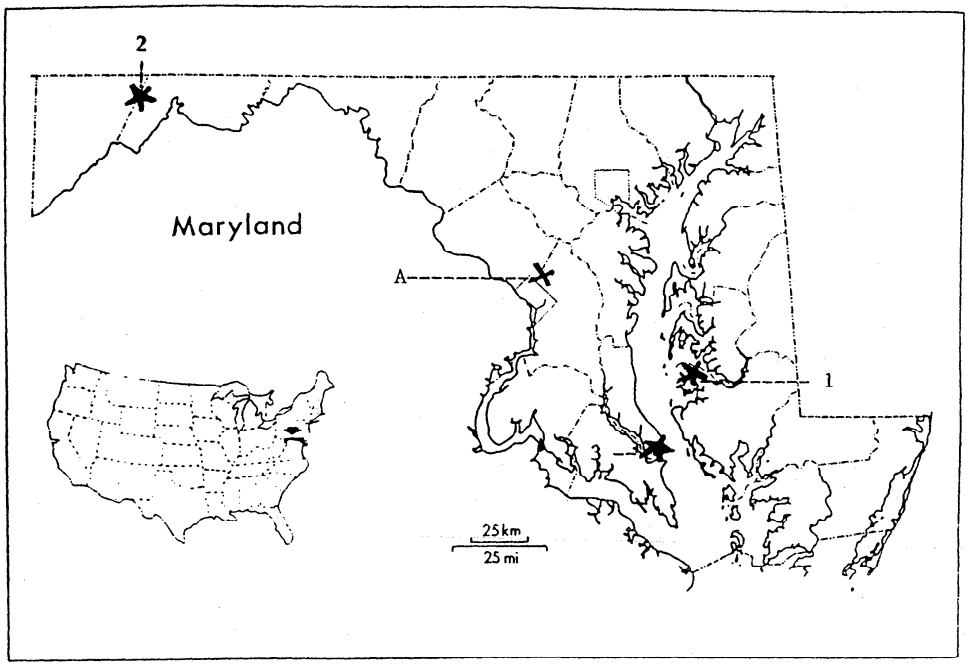
INTRODUCTION

Need for improved control and access was the primary reason the automation project was undertaken. The Library at The Chesapeake Biological Laboratory (CBL) a unit of the University of Maryland, Center for Environmental and Estuarine Studies (CEES), is the main library for all three geographically isolated research facilities:(Chart 1) mainly the CBL site and the Horn Point Environmental Lab (HPL) site, but also the Appalachian Environmental Lab (AEL). The number of research personnel totals about 250 (faculty, staff and students) with about 75 of these persons being frequent library users.

The collection includes approximately 5,000 books; 40,000 periodical volumes (600 titles); 15,000 government documents and foreign publications; 65,000 reprints as well as an unclassified map collection. The purpose of the collection is to support the research needs of the faculty and graduate students. Our main research areas are: 1) fisheries, 2) ecosystem studies, and more recently 3) environmental chemistry & toxicology.

Although the University is automating, the CEES campuses have not been recognized as having "campus-level" library status in the University Library system. The CBL library had only a dictionary card catalog which had limited value because there were: 1) no cards at all for some books; 2) too few cards (many items have only author and/or title cards); 3) misfiled cards a)spelling errors, b)subject cards errors (lack of

CHART 1



A. Univ. of Md., College Park
1. CEES Headquarters and Horn Point Lab (HPL)
2. Appalachian Environmental Lab (AEL)
3. Chesapeake Biological Lab (CBL)

capitalization or red ink); c) no authorities files or uniform titles. There was a separate catalog (4 full files boxes) for serials, periodicals and government documents, which had one card per serial or document title. These cards were filed in a multitude of ways: 1) some by title; 2) some by organization; 3) some by country/state; and 4) some by government agency.

Most of the time when our staff want information they have a specific item in mind. Although author/title are most frequently what they know, they often want something produced or sponsored by a particular group. Additionally, much weight is put on contributors. Only new staff consult the card catalog due to its many faults, all other staff know their subject area in the collection very well or allow enough time to browse.

The goa of automating the library was included in the five year plan in small increments due to our limited funds. The projected CEES faculty and administrative goal being an on-line catalog that would be accessible January 1, 1987. Library and computer-phone networking access (not direct wiring) were projected access goals.

METHODS:

The main concern in automating the library was keeping the costs under $15,000. The needs assessment (Table 1) presents the major items considered important in evaluation of CBL priorities. The flow of operations (Table 2) shows the preparation and how the budget was divided. The preliminary library needs sheet (Table 3) was developed prior to development of a strict evaluative criteria sheet for all programs considered. The evaluative criteria sheet listed all criteria that would be part of the Request for Proposals (RFP) (Table 4).

After choices had been narrowed, RFP's went to purchasing on the main campus along with documentation that was used to determine final choices. We had decided that for our small geographically isolated library the best combination would be using Circ+ for circulation control and basic access; and BiblioFile for retrospective conversion, cataloging, resource for bibliographic verification and as a link to Catalog plus which Follett was developing and testing.

The file clean-up/inventory for the book collection (3,100 items) took 242 hours (average 18 hours per week for 13.5 weeks - April, May and June). The data entry, addition of control numbers and basic cataloging took 200 hours (average 40 hours per week for five weeks - July, August). The addition of the bar code labels to the books took an additional 40 hours in August. The average time per book (Table 5) was: 1) four and one-half minutes for file clean-up/inventory; 2) four minutes per data entry, assigning bar code numbers and basic cataloging; 3) One-half minute for adding bar codes and protective label covers. This gives a total time of 9 minutes per book.

Follett's Circ plus offers a choice of IBM PC (AT or XT or System/2) or Apple

software. Follett's Catalog Plus (utilizing full L.C. MARC records) is being tested first with the IBM Circ + system. We chose the Follett IBM Circ+ as the least expensive way to provide easy, improved access and control. The bibliographic retroconversion choice was BiblioFile (The Library Corporation). Considering the poor condition of: 1) our shelf-list and 2) telephone connections we wanted a system that was usable locally and that we could later use to convert the collections at the other sites for a union catalog. The BiblioFile package we purchased included an IBM PC XT compatable with 20MB hard disc and one 5.25 in. disc drive and an external Hitachi CD-ROM drive. The additional equipment we purchased included an uninterruptable power supply (UPS); two reconditioned Hewlett-Packard terminals with thermal printers and an Epson LX 80 printer.

DISCUSSION/RESULTS:

Entering data onto Follett's Circ + was simple, quick and easy. Circ+ has simple menus and templates and allows a wide range of system setup options (i.e. circ length, patron type). The only drawback we had to deal with was slowing down the speed at which the bar wand needed to be used for scanning, and Follett was very good at working with us until we were satisfied. Follett has provided excellent assistance and sends out a monthly newsletter which includes tips from others and solutions to common problems. Additionally, the projected cost for the addition of the Catalog Plus software and necessary add ons (@$1,800) will still keep us below our initial budget.

Our retrospective conversion of records has been going reasonably well using BiblioFile. Of monographic records searched, sixty-nine per cent of the items searched resulted in matches and an additional five per cent were close enough to use as a basis and modified. Twenty-six per cent of the items searched had no records to be saved (needed to be cataloged) (Table 6). The time spent on the three quarters of the records that have been saved to disc has been about two minutes each. I have been marking those not located/modified to search on OCLC. The interlibrary loan office on main campus has offered to let me access OCLC in the evening hours when they are not open. This may reduce the number of monographs that need original cataloging even more. It did take awhile to get used to MARC tagging and taking an extra course or training would certainly be a plus.

TABLE 1
OPERATIONAL PLAN

A. Items For Consideration

1. Purpose
   a. provide improved access
   b. expand availability of resources (networking)
   c. correct inaccuracies & inconsistencies
   d. ease maintenance
2. Hardware choice
   a. current & future computers at our campus
   b. current computers at UMCP
   c. Storage available for current holdings & 5 year projected growth
3. Software choice
   a. use of MARC records
   b. hardware to be used
   c. what is it to do now (on-line catalog/circulation)
   d. future uses (ILS?)
4. Preparation of Collection
   a. weeding
   b. shelf reading/inventory (mark ISBN & LC on shelf list at the same time)
5. Retrospective conversion choices
   a. batch processing
   b. on-line a) turnkey, b) local connect to bibliographic database
   c. micro/mini/mainframe
   d. in-house
   e. other
6. Staffing
   a. qualifications
   b. starting when on time line
   c. work pattern

TABLE 2

OPERATIONAL PLAN

B. ACTIVITY FLOW

1. Review the literature
2. Talk with people who have done or are doing conversions
3. See demonstrations
4. Write Requests for Proposals
5. Send RFP's
6. Hardware and software choices
7. Preparation of collection
8. Hiring staff
9. Set retroconversion standards
10. Start retroconversion
11. Implement on-line circ and catalog

C. BUDGET

1. Hardware
2. Software
3. Personnel
4. Supplies

TABLE 3

LIBRARY NEEDS

A.1. Purpose - Improve access to the collection and correction of inaccuracies and inconsistencies.
The desire of the faculty and staff was to have access to the collection available to faculty and staff from all three CEES units. Additionally, access from office and home computers was to be considered.
The need for a serials and periodicals listing was desired.
A circulation control system was desired - although not high volume, many materials have been lost by staff leaving with materials.

A.2. Hardware choices
IBM/PC/AT or equivalent probable choice because of its: a) storage capacity, b) networking capability; c) 80286 chip for speed of processing.
GEAC because of its developing technology in the micro area since it is the system being used at UMCP.
Intel because of its expandable system concept.

A.3. Software choices
Must accommodate FULL MARC records, stressed in all the literature and by everyone I spoke with.
Circulation control and on-line catalog
Future expansion

A.4. Preparation of the collection
Half the collection already weeded, needed to be done and a sampling of the shelf list cards. Only 20% of the cards appeared to be LC. The inventory produced 30% more materials than in the shelf list.

A.5 Retrospective conversion
Due to the inaccuracies of the shelf list and difficulties in getting materials returned as well as the poor quality of our phone lines we need a means of retrieving and producing full MARC records in-house. First to be done will be monographs, secondly series, third, will be periodicals and last will be technical reports.

A.6 Staffing
One person part-time ASAP to complete inventory initially and then to keyboard, and one person through the summer to assist in cataloging.

TABLE 4

CRITERIA FOR MICROCOMPUTER LIBRARY SYSTEM - CBL

Criteria	company names
IBM or compatible	
license fees	
maintenance fee	
update fees	
MaRC RECORD	
available now	
future	
L.C. capable	
BARCODE	
now	
testing	
HARD DISK BASED	
circulation	
circulation statistics	
category	
traps	
PATRON STATISTICS	
how many	
due dates	
overdues	
BOOK	
INVENTORY	
in, out	
on order	
overdue	
accounting	
copies	
reserves	
LC categories	
NOTICES	
REPORTS	
ON-LINE CATALOG	
Full MaRC record	
present	
future	
FIELDS	
lost, paid, bindery	
on order, definable	
COSTS	
Under $1,000	
Under $5,000	
Under $10,000	
Over $10,000	
MENU DRIVEN	
SUPPORT SERVICE	
Software fee	

TABLE 5

CONVERSION EFFORT - (3,100 MONOGRAPHS)

	HOURS INVOLVED	RECORDS PER HOUR
FILE CLEAN-UP/ INVENTORY	242	12
DATA ENTRY/ CONTROL #	200	15
BAR CODE BOOKS	40	77

TABLE 6

L.C. CLASSIFICATION SEQUENCE A - P

EARCH TIME	RETRIEVE MINUTES	ITEMS COUNT	HITS COUNT	SAVED COUNT	REVIEW COUNT	NEGATIVE HITS	NO MATCH
10	15	31	23	4	19	2	7
18	10	29	22	7	14	1	7
30	40	38	30	6	18	2	9
35	15	42	36	8	28	3	6
TOTALS 93	80	140	111	25	79	8	29