

How to Inventory a Small Library



Figure 1

The Library

The Yukon Energy, Mines & Resources Library (EMR Library) is a small government library located in Whitehorse, Yukon, with a collection of approximately 50,000 monographs.

In 2003 the Federal Government devolved many responsibilities to the Yukon Government. At this time several federal and territorial libraries were amalgamated to form the EMR Library. This led to many problems in the library catalogue, including: incorrect records, missing item records, missing books, and duplicate records.

In the summer of 2009 we received funding from the Yukon Department of Education to hire a summer student through their annual Student Training and Employment Program (STEP) <http://www.education.gov.yk.ca/advanceded/employment/stepprogram.html>. With this funding we hired a brilliant and capable summer student, Cheryl Otterbein, to do an inventory of our library holdings and compare it to our catalogue. Before Cheryl arrived we began to plan for the inventory so that we would have everything in place when she started.

Our first step was to find a way to compare what was actually on the shelf with what was in the catalogue. To do this, we needed to run a report of the catalogue in call number order (EMR Library uses Library of Congress Classification System), and we needed a

list of the books on the shelf in call number order. Then we needed a method to compare the two lists.

Our Integrated Library System (ILS), Virtua¹, has the capability of running reports by location, in call number order, using the InfoStation report writing module. These reports give us a list of monographs that should be on the shelf according to the catalogue. The location is important, as we are part of a consortium, and it was necessary to eliminate everything but EMR Library monographs. To obtain the list of books actually on the shelf in call number order, we scanned the barcodes on the books, using a handheld scanner² and a Netbook³ computer. To compare the two lists, we imported them into Excel⁴. We only needed the barcodes, so we stripped out all other information (title, author, etc.).

The eureka moment came when we realized that we could use an Excel formula to compare the barcodes in the two lists. The hunt was on for the perfect formula that would produce two new lists: 1) barcodes scanned but not in the report generated by Virtua, 2) barcodes in the report but not scanned (i.e not found on the shelf). We went to the Internet with our problem. Who knew there are geeks out there who are not only working on the same problem, but are willing to share their results? There are several good sites with lots of help available such as: <http://www.mrexcel.com/>, <http://www.eggheadcafe.com/> and <http://en.allexperts.com/q/Excel-1059/>

Test

As with any large project, it is advisable to do a test before proceeding into muddy waters. We ran a test on our Rare Books collection, because it is small (approx. 500 items), and shelved separately from the main monograph collection.

Steps

1. ran report in Infostation (Virtua's reporting module) - barcodes in call number order - copied barcodes into Excel (Column A)
2. scanned books on the shelves using handheld scanner and Netbook Computer - exported barcode numbers into Excel (Column B)
3. compared the 2 lists using the following formula:
`=IF(ISNA(MATCH(A2,B:B,FALSE)),A2,"")` (Column C)
to identify barcodes in catalogue but not on shelf
`=IF(ISNA(MATCH(B2,A:A,FALSE)),B2,"")` (Column D)
to identify barcodes on shelf but not in catalogue
this produced 2 lists:
in report but not scanned (Column C)
scanned but not in report (Column D)

A	B	C	D
Item Barcode	Scanned Barcodes	Report Not Scanned	Scanned Not On Report
1000344130	1000357830		
1000344640	1000357829		
1000357713	1000344130		
1000559902	1000344640		
1000580602	1000357713		
1000359570	1000332834		1000332834
1000341285	1000559902	1000341285	
1000570006	1000332860		1000332860

Figure 2

4. checked discrepancies listed in Column C and Column D

Main Collection

The test went surprisingly well, which lulled us into a false belief that inventorying the total Monograph Collection would be smooth sailing.

As we did not want to tackle huge lists of barcode numbers, we decided to undertake the inventory one bay at a time. We followed the same 4 steps as we had for the test, except that we ran reports in call number order by bay, and scanned all the books on that bay.

Problems

1. We found that the InfoStation reports needed refining, which we did by eliminating all unnecessary locations, and eliminating all extraneous information (author, title, etc.)
2. Theoretically, InfoStation should have been able to produce reports of very specific call number ranges (e.g. FC23.C36 to FC630.C34), but these reports were not accurate enough because of inconsistencies in the way call numbers had been entered into the records. We ended up producing more general reports (e.g. FC), sorting by call number, and selecting from the list the range that was actually on the bay.
3. Some books that were in the catalogue did not show up on the InfoStation report; again because of inconsistencies in call number formatting in the records.
3. It would have been ideal to list the call number beside the barcode to make it easy to find the book in case of discrepancies; but we were not able to do this for the majority of the items, again due to inconsistencies in the item records and/or bibliographic records.
4. The first barcode scanner we used was totally inadequate and irritating. It would “go to sleep” and had to be shaken to “wake it up”, which was very hard on Cheryl’s wrist. This was replaced by a SYMBOL LS2208 scanner; which improved Cheryl’s disposition and also improved scanning accuracy.

Dealing with discrepancies

Cheryl checked each item that was scanned but not in the report. These were books that were on the shelf, but for some reason did not show up on the report. She first checked to be sure there was a bibliographic record and an item record; and if there was, she tried to determine if there was an error in the record that was causing the problem.

She also checked each item that was in the report, but not scanned. These were books that were listed in the report, but had not been scanned on the shelves. Cheryl first checked to see if they really were on the shelf, and had somehow been missed. She then checked the item record to see if the book was checked out, at the bindery, etc. Some of these items showed up later on as misfiled books.

Cheryl colour coded the problems by category (see Figure 3 below). She then corrected catalogue problems (e.g. bib record, but no item record), and shelving problems (e.g. whole sections of books being misfiled).

Item Barcode	Scanned Barcodes	Report Not Scanned	Scanned Not On Report
1000500882	1000348019	1000500882	1000348019
1000500881	1000332827	1000500881	1000332827
1000503696	1000332832		1000332832
1000483744	1000580602		
1000544199	1000359570		
1000357830	1000570006		
1000357829	1000570007		
1000335559	1000570008	1000335559	
1000330325	1000580606	1000330325	
1000811360	1000580458	1000811360	1000580458
1000824305	1000580463	1000824305	1000580463

Figure 3

Results

Cheryl fixed a number of problems including:

- Books without a bib record - were given to cataloging staff
- Bib record without an item record – created an item record
- More than one call number in the bib record – checked Library of Congress Classification Web⁵ for the correct call number
- Duplicate bar codes – gave one of the books a new barcode, and entered it into the item record
- Misfiled books – filed them correctly
- Missing books - out of 769 missing books, 50 were found, and the rest were deleted from the system

We are now confident that our catalogue matches what is actually on the shelves of the library.

Equipment & Software

¹ VTLs Virtua <http://www.vtls.com/>

²Handheld Scanner SYMBOL LS2208
http://www.motorola.com/staticfiles/Business/US-EN/AB/LS2208_P.html?vgnextoid=e37575489c075110VgnVCM1000008406b00aRCRD

³ Netbook Computer ASUS Eee PC 10 inches
<http://eeepc.asus.com/global/products.html?n=0>
Intel Atom Processor 1.66 GHz
2 GB RAM

⁴Excel <http://office.microsoft.com/en-us/excel/default.aspx>

⁵Classification Web <http://classificationweb.net/>
