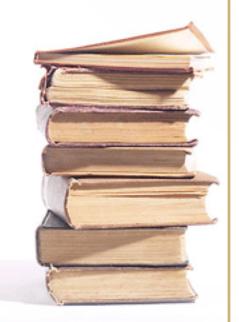
### Our First Automated Inventory

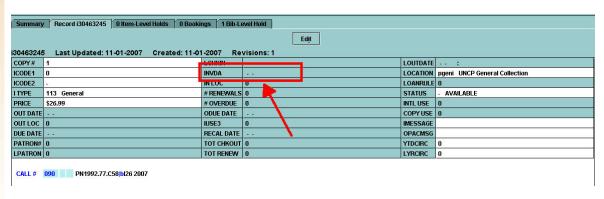
A Learning Experience

June L. Power, MLIS UNC-Pembroke



## In the beginning...

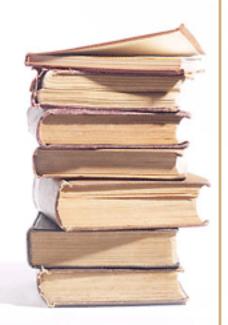
...the inventory date was void.





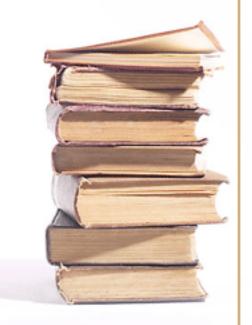
### Overview

- Why Inventory?
- History
- Strategic Plan
- What Actually Happened
- Wrap-up



### History of Inventory at UNCP

- Last complete library inventory conducted in 1994 when UNCP became an III library
- All previous inventories were completed manually
- A Percon B321 scanner had been purchased, but automated inventory had not been implemented due to technological difficulties in using the B321



## Why is Inventory Necessary?



Patrons and staff misshelve items



## Why is Inventory Necessary?

#### Patrons hide items









## Why is Inventory Necessary?

- Items are reshelved without being checked in
- Items are missing
- Items have an incorrect status (either on shelf or in the system)
- Items have errors in their item record
- Patron claims item returned

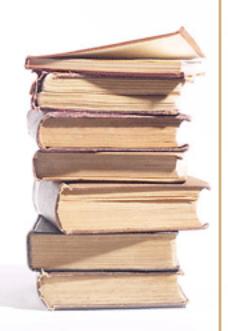






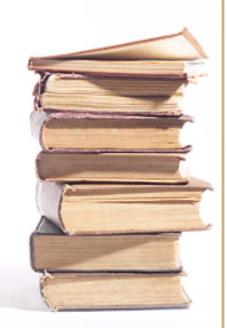
## Strategic Plan

- Equipment
- Procedures
- Timing
- Tracking
- Follow-up



### Strategic Plan - Equipment

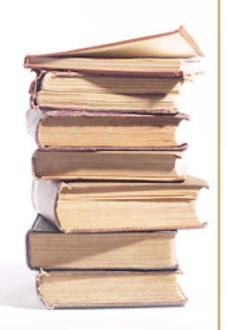
- Percon B321
  - Only one scanner
  - Only one file at a time
  - Must directly upload files from scanner
  - Required training on use of scanner
- Laptop with notepad and barcode scanner
  - Multiple scanning stations possible
  - Multiple files can be generated at one time and saved for batch uploading
  - Files can be uploaded from any desired storage media, direct ftp transfer, or e-mail
  - Training unnecessary



### Strategic Plan - Procedures

- Perform test scans of small file sizes – 10-20 items
- Begin scanning collection for inventory processing
- Reconcile inventory reports and correct shelving and item record errors

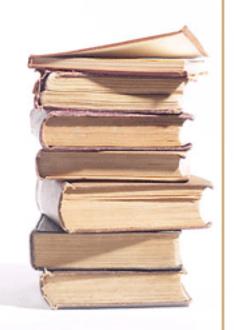
(Of course this plan changed as we learned things along the way...but more on that later.)



### Strategic Plan - Timing

- Begin scanning the general circulating collection at the beginning of the spring semester
- Complete in one semester
- Scan folio, juvenile, and reference collections over the summer break

(This part of the plan also changed as the rest of the plan was altered.)



### Strategic Plan - Tracking

#### Scanning Log

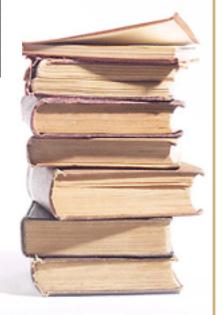
AUTOMATED INVENTORY LOG



Call Number Started	Call Number Stopped	Date	Time(start/stop)	Name	# of Books
		31			
		4			
	-	1			
	-	1			
		542		,	

General Collection										
Began	AC1 E8 no. 994									
Stopped	F232 D7 R69 2000									
Number Books in General Collection	173,951									
Number Books Shelf-Read Manually	39,758									
Number Books Left	134,193									
Estimated Avg. No. Books Read/Hour	385									
Actual Avg. No. Books Read/Hour	452									
Number Hours Estimated for Shelf-Reading	452									
Number of Hours Completed	88									
Number of Estimated Hours Remaining	364									
Adjusted Number of Hours Remaining	297									

Progress Reports



### Strategic Plan – Follow-up

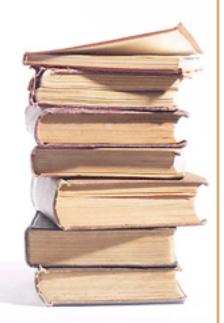
- Statistical reporting
  - By collection
  - Number of hours
  - Number of items
  - By staff person
- Integration into workflow
  - Annual inventory schedule
  - Student worker training guide
     <a href="http://www.uncp.edu/home/powerj/st">http://www.uncp.edu/home/powerj/st</a>
     <a href="http://www.uncp.edu/home/powerj/st">udentscanning.pdf</a>
  - Job description revisions
  - Staff training



### Strategic Plan – Follow-up

- Documenting inventory processing procedures
  - Processing Inventory Reports
     <a href="http://www.uncp.edu/home/powerj/p">http://www.uncp.edu/home/powerj/p</a>
     <a href="mailto:rocessinginventory.pdf">rocessinginventory.pdf</a>
  - Reading and Correcting Inventory Reports

http://www.uncp.edu/home/powerj/readcorrectinventory.pdf

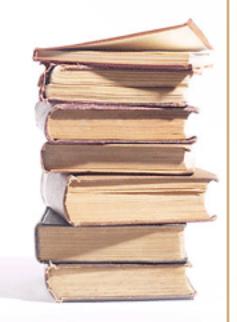


- Test files
- Automated inventory scanning – Round 1
- Manual shelf-read
- Automated inventory scanning – Round 2
- Project Barcode
- Automated inventory scanning – Round 3



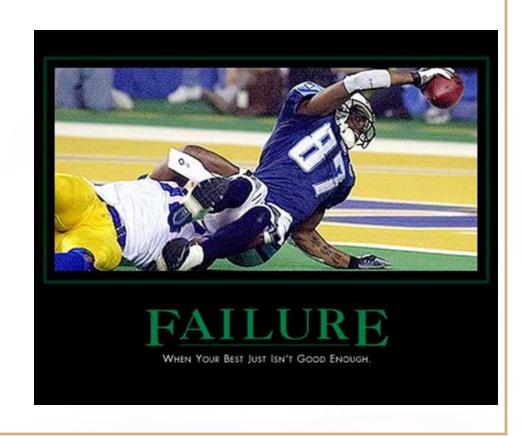
# What Actually Happened...or When Plans Change – Test Files

- Test files with the laptop set-up were scanned in groups of 10-20 and saved to removable media (flash or floppy drives)
- Test files copied to local server space (F: drive)
- Test files successfully processed in text-based Innopac as per procedures in III manual (see relevant manual pages at end of presentation)



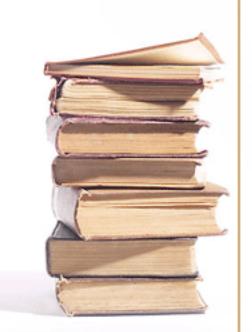
Automated inventory scanning - Round 1

- Began cautiously, scanning only a few files of about 300 items each
- Had staff complete scanning – not student workers in case any problems
- First stumbling block
   files did not
   process shelves
   too disorderly



#### Manual shelf-read

- Conducted during Spring 2006 semester
- Printing shelf lists general, reference, folio, and juvenile collections
- Establishing three tier process to be done, completed, and post-processing
- Post-processing to update item statuses
- Enforcing time limits
- Tracking



Automated inventory scanning - Round 2

- Began cautiously, scanning only a few files of about 300 items each
- Had staff complete scanning – not student workers
- Made sure sections scanned were in order first
- Second stumbling block – files did not process – two barcodes

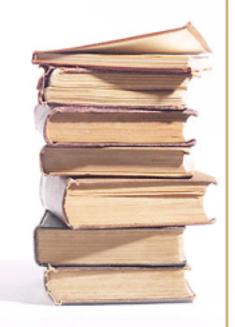




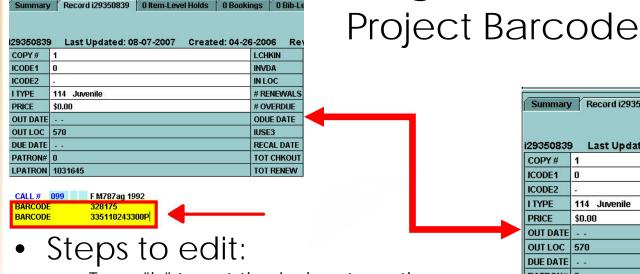
# What Actually Happened...or When Plans Change Project Barcode

- Conducted July November 2006
- Many item records had two barcode fields accession number and barcode
- Cataloging procedures had accession number first and barcode on books second
- Barcode order had to be switched to enable successful file processing

- Cataloging and circulation staff worked to correct over 100,000 item records manually over the course of several months – cataloging provided lists of records needing to be modified
- To save time created macro under special project specific login/password



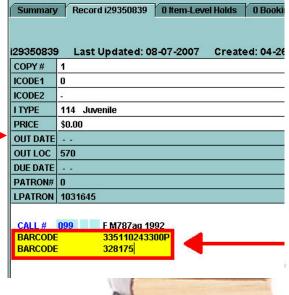




 Type "b" to set the index, type the accession number, click search or press enter.

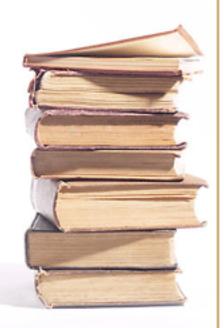
 Click once in the second barcode field b.

- Select Edit
- Select Move barcode up
- Save/close
- Type "b" to set the index and type the next accession number.



# What Actually Happened...or When Plans Change Project Barcode

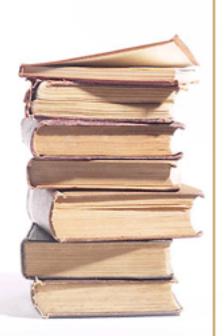
- Macro: %PGDW%%Alt+e%H%Alt+q%b
- Translates into:
  - Selecting edit from the toolbar (%Alt+e)
  - Selecting the move up command in the edit menu (%H)
  - Quitting (%Alt+q)
  - Selecting b to search for the next barcode (%b)
- F12 was our macro key



# What Actually Happened...or When Plans Change Project Barcode

#### Steps became:

- Type "b" to set the index, type the accession number, click search or press enter.
- Click once in the second barcode field b.
- Enter F12
- Enter "y"
- Enter the next accession number.



Automated inventory scanning - Round 3

- Retested processing with files of about 300 items each
- Files processed successfully!!
- Full scale inventory was begun
- Librarians, staff, and student workers participated in scanning



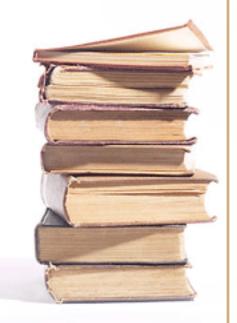
### Possible Errors

- Spaces in file name
- File empty
- Bad data transfer failed
- No item record to match barcode
- Check digit missing
- Check digit not capitalized
- First or last call number is not in order
- More than 10,000 items between first and last items

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The system has searched through the next 5000 items and none are in the specified LOCATION pgeni.

Do you want INNOPAC to continue searching? (y/n)



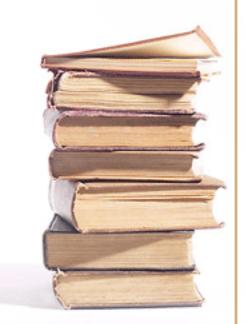
#### **Statistics**

- Began successful scanning in December 2006 and finished in May 2007
- Collection Totals
  - General Circulating
    - 377.75 scanning hours
    - 138, 096 items scanned
  - Folio
    - 11 scanning hours
    - 5,741 items scanned
  - Juvenile
    - 21 scanning hours
    - 5,673 items scanned
  - Reference
    - 31 scanning hours
    - 12,856 items scanned
- Approximately 3700 items subsequently determined to be missing

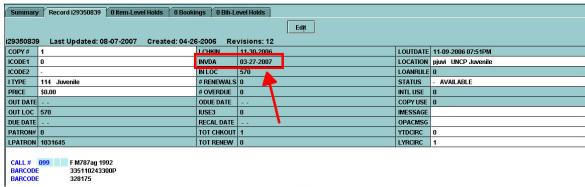


### Follow-up

- Took Summer 2007 off as a reward circulation staff treated to lunch
- Fall 2007 student workers began rescanning the General Circulating collection to be continued indefinitely as part of regular duties 1 hour per student per week
- Circulation Assistant processing and reconciling inventory reports weekly as part of regular duties
- Semester breaks will be used to scan reference, folio, and juvenile collections
- Tracking logs still kept to determine progress and participation



### Thus the inventory date was created...



...and it was good.



### Relevant Manual Pages

- Inventory Dates, p. 102577
- Inventory Control, p. 102566
- Comparing Scanned Inventory Data to Shelf Lists, p. 102571
- Producing the Inventory Report,
   p. 102575
- Processing PC and Portable Reader Transactions, p. 102551
- Printing the Shelf List, p. 102567
- Inventory Statuses, p. 102576



#### Works Cited

- Unshelved Comics from Overdue Media
   www.overduemedia.com/
- Failure Poster from Despair, Inc. <a href="http://despair.com/">http://despair.com/</a>

Presentation Available Online <a href="http://www.uncp.edu/home/powerj/inventorypresentation.pdf">http://www.uncp.edu/home/powerj/inventorypresentation.pdf</a>

