

FMNHINS Specimen Barcode Labels

Instructions for Printing and Use

A single series of unique numbers (FMNHINS0000000000) applies to all specimens or lots that receive a number, regardless of taxon or storage method. The numbers are primarily for Field Museum specimens, but can also be assigned to borrowed study specimens (from other institutions) that do not already have a comparable number. They should NOT be added to specimens that already have a similar specimen number, bar code, etc.



Specimens/lots should only receive a number when (or after) their label data are databased, and the number should be added then to the database (or spreadsheet) record. We use EMu to assign the numbers to our specimens, taking the irn in the upper left hand corner of the catalog record and assigning it as the catalog number. The number thus provides a key to find each specimen's database record, as well as uniquely identifying the specimen (as a voucher, when the data are published). Using this process, records in EMu are generated before they are actually edited to include label data or multimedia. **When entering new specimens using barcodes, remember you will be editing records, not creating new ones.**

On pins, FMNHINS labels should go **under** the normal collecting-data labels and other pre-existing labels, and **above** determination labels added concurrently or subsequently. Pins should be inserted in the space between the catalog number and the FIELD MUSEUM line.

In alcohol vials, they should be inserted in the usual way (right end upward, barcode towards bottom), with the barcode and number facing outward.


Print batches of labels, 310 at a time or in multiples of 310, as that will give you a full sheet(s) of labels and reduce paper waste. The labels can be used for both pinned specimens or alcohol specimens depending on which paper is used.

For Alcohol:

Use one of the Epson Workforce 60 or 2070 printers, at 1200 dpi in black & white to print using "Byron Weston Linen Record 1976" paper; this is the 36 sub (heavyweight) alcohol paper we use. The paper name shows in the watermark of at least some sheets, readable when the paper is held in portrait mode.

For Pin:


Use one of the Brother, HP Laserjet P1606 DN, HP Laserjet 2100 printers to print using the "pin label" paper.

**If this is your first time generating the barcodes on a computer, you will need to download and install the font on your computer found here: <http://www.idautomation.com/barcode-fonts/2d/qrcode/user-manual.html>. You only need to do this once per station. Use the  (Demo Now) option. There is no need to install a shortcut on your desktop as this will run in the background.

To Generate barcodes:

1. Open and sign in to EMu.
2. Open a Catalog module.
3. Find an appropriate template record in the groups that have been shared with all Insects Users.
Go to Tools ► Group ► Retrieve Group.
 - a. Pin record template for Barcodes (irn 2921809)
 - b. Alcohol record template for Barcodes (irn 2921806)

**Note: If a template does not already exist that fits your needs, select and use a similar record from your project or contact your supervisor to find out which record to use as a template.
4. Open up the template. Go to Tools ► Template ► InsectsCatalogNumber (owner nuthatch) ► OK
5. You will be prompted to answer a series of questions
 - a. Number of records to create: 310 or multiples of 310 (in test this will be limited to 10)
 - b. Enter catalog subset name: The order of the specimens you are working on (Right now everything except Myriapods & Arachnids, Coleoptera, Formicidae, and
 - c. Enter the project name: your project's name
 - i. If not for a specific project, use Barcode Generation (pre-databasing)
 - ii. Currently this is limited to only one option. Janeen is looking into whether we can insert multiple projects in the future.
6. Your catalog records have been generated. **Create a group** of your new catalog records so you can easily find them in the future. Remember, when you are entering the label data, you will be **editing** these existing records, not creating new ones.
 - a. Tools ► Group ► All Records in Results... ► New ► (Enter the name you wish to remember this by, project names work well) ► OK
7. The catalog numbers will appear blank and empty, you need to fill this in.
 - a. In future client editions (expected Aug 2014), this will be auto-generated from the catalog record irn.
 - b. To remedy this as an Insects User, copy and paste the irn from each record into the CatCatalogNo2 field.
 - c. As an Insects Manager, a simple two-column (irn, CatCatalogNo2) import will fill in the catalog number with the irn.

8. With your newly generated catalog records still in the catalog module, create the InsectsQRCode report. Go to Tools►Reports►InsectsQRCode►Report all
 - a. Select label size: 7mm, 4 line
 - b. Select label type: Pinned or Wet based on your project needs. This will print on your label to help identify which type of paper it was printed on once it is cut.
 - c. Click OK
9. A crystal report will be generated which you can print directly to the appropriate printer based on whether you will be printing alcohol or pin labels.
10. Before printing, if you want to double check your report to make sure the barcodes will read correctly
 - a. Enlarge the barcodes on the screen using zoom, 200% and up works well.
 - b. Scan the barcodes on the screen using a barcode laser scanner or smartphone with a barcode scanner app like Scanlife, ScanPet
 - i. If it reads as a two-line output saying DEMO, FMNHINS#####, you need to redo your report.
 - ii. If it reads as a single-line output saying FMNHINS#####, your barcodes have printed properly.
 - c. This step is not mandatory, but would be helpful to check before applying any barcodes to specimens.
11. If you need to take your labels elsewhere, export the report as a pdf and it will be printable from other devices, even those that do not have the 2D QR font installed on them.
 - i. Click the Export Report button  in the upper left hand of the Crystal Report viewer window
 - ii. Select Format: Adobe Acrobat file (PDF) and Destination: Disk File

When cutting the barcodes, make sure to leave white space around the barcode itself to make ensure readability. If you cut up against the black ink of the barcode, it will make the barcode much harder to read with a barcode scanner. Do not cut into the barcode as that will render the labels unreadable.

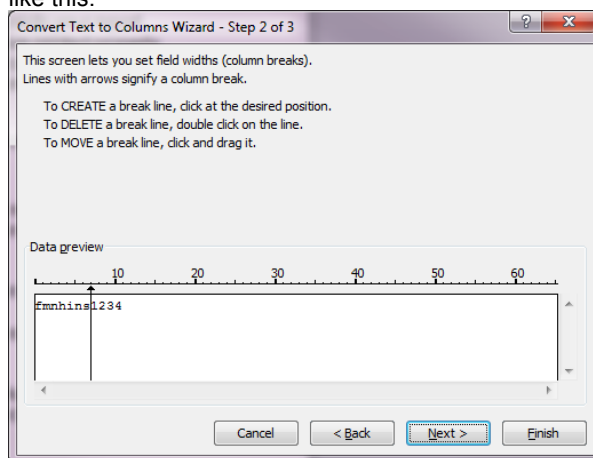
Only print your barcodes once. Do not reuse old filled in records in EMu to directly generate new barcode labels. Once a copy has been printed, make sure all the barcodes are accounted for.

If you need to reprint single copies of barcodes (if the barcode has been cut or a label was SURELY lost), find and select the corresponding records using their irn/catalog number and go to step 8 above.

If you have leftover barcodes once a project is completed, give the remainder to your supervisor or Beka for reuse. The records still exist in EMu, whether you use them or not. We can and will put them to use in a new project.

To find a record in EMu using the barcode:

1. Scan the barcode(s) into an Excel cell
2. Remove the FMNHINS that appears before the number and copy just the number
 - a. In Excel 2010, go to the Data Tab and select Text to Columns
 - b. Select Fixed Width ► Next
 - c. On the next screen, drag the bar/arrow in the lower section until it falls between FMNHINS and the number like this:



- d. Click Finish
3. Your records will now be divided into two columns. Column 1 you can ignore as it only says FMNHINS and column 2 has your irns/catalog numbers.
4. Copy the column 2 containing your irns/catalog numbers.
5. Open EMu and select a Catalog Module
6. Go to Tabs ► Admin► Internal Record Number field
7. Select all and paste your irns/catalog numbers into the Internal Record Number field
8. Find.

Any questions or problems, see Beka (x7742, rshuman@fieldmuseum.org, Room 3311) or Janeen Jones (x7724, jjones@fieldmuseum.org)