Denver Museum of Nature and Science Anthropology Department  
2019 NEH Archaeology Rehousing Workflow

Materials
- Archival bags with white label (4 mil)
- Blotting paper
- Sharpies
- Premade box (or blue board and rivets for custom boxes)
- Blue board separators
- Scissors
- Fletcher 3000 wall cutter (or a box cutter and ruler)
- Pencils

Procedure

Prepare the bags
- Choose a bag size that will work for the objects you are rehousing. One size does not fit all. Choose a size that is just large enough to comfortably fit the object. (1)
- Cut a blotting paper insert to fit into the bag. It works best to cut as many as you need before proceeding to rehousing. (2)
  - For faunal material and large artifacts, blotting paper may not be necessary. If the object does not fit in the appropriately sized bag with blotting paper, but does fit in the same bag without the blotting paper, do not use the blotting paper.

<table>
<thead>
<tr>
<th>Bag Size</th>
<th>Blotting Paper Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 in x 3 in</td>
<td>1 ¾ in x 2 ¾ in</td>
</tr>
<tr>
<td>3 in x 5 in</td>
<td>2 ¾ in x 4 ¾ in</td>
</tr>
<tr>
<td>4 in x 6 in</td>
<td>3 ¾ in x 5 ¾ in</td>
</tr>
<tr>
<td>5 in x 8 in</td>
<td>5 ¾ in x 8 ¾ in</td>
</tr>
<tr>
<td>6 in x 9 in</td>
<td>6 ¾ in x 9 ¾ in</td>
</tr>
<tr>
<td>8 in x 10 in</td>
<td>7 ¼ in x 9 ¾ in</td>
</tr>
<tr>
<td>10 in x 12 in</td>
<td>7 ¾ in x 10 ¾ in</td>
</tr>
<tr>
<td>12 in x 15 in</td>
<td>8 ¼ in x 11 ¾ in</td>
</tr>
<tr>
<td>15 in x 18 in</td>
<td>9 ¼ in x 14 ¾ in</td>
</tr>
</tbody>
</table>

- If your institution is not using barcodes for object location and identification, slide the blotting paper into the bag and skip to step/illustration (4)
• Slide the blotting paper into the bag. Leave ~1/4 of the blotting paper out of the bag for the barcode. Apply the object’s barcode to the top left side of the blotting paper. Slide the blotting paper into the bag, with the barcode facing the white section of the bag. (3)
  
  o If blotting paper is not used, adhere the barcode on the top left corner of the bag, above the white section.

• Write the catalog number and object count on the white section of the bag using permanent ink. (4)

• Place the object into the bag, ensuring that the object is visible on the back of the blotting paper (facing the opposite side of the white section). (5)
  
  o If there was an associated tag/label found with the object in its original bag, ask a Collections Assistant or Collections Manager about what to do with it. Often times, the tag will be placed in the new bag with the object if it includes important information not found in the database.
Prepare the Box

- Use a premade box with adjustable inserts and line up the bags in the box in numerical order with the lowest number in the front left of the box if possible.

- If needed, you can create a box to fit your storage needs. To calculate dimensions for a box, you can input the following calculations below into Microsoft Excel, and change them according to your needs.
  
  - You can create a box using the “Exact Fit” dimensions: (Length, Width, and Height refer to object length, object width, and object height.)
    
    \[
    \begin{align*}
    \text{Length of Board:} & \quad (\text{Length}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Width of Board:} & \quad (\text{Width}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Height of Fold:} & \quad \text{Height} + 0.5
    \end{align*}
    \]

- Decide the width and length of the box based on your storage needs and the size of your object(s). These calculations will provide the size of board you will need to construct the box. If you plan to have several rows in your box for bagged material, this calculation will change depending on the number of rows needed per box and the amount of space available in storage.

This table shows the calculations used to create a box with one or more rows.

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Board Dims</th>
</tr>
</thead>
</table>
| 1 row  |       |        | \begin{align*}
    \text{Length of Board:} & \quad (\text{Length}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Width of Board:} & \quad (\text{Width}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Height of Fold:} & \quad \text{Height} + 0.5
    \end{align*} |
| 2 rows |       |        | \begin{align*}
    \text{Length of Board:} & \quad (\text{Length}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Width of Board:} & \quad (\text{Width}+1) + (2\times(\text{Height}+0.5)) \\
    \text{Height of Fold:} & \quad \text{Height} + 0.5
    \end{align*} |
| 3 rows |       |        | \begin{align*}
    \text{Length of Board:} & \quad (\text{Length}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Width of Board:} & \quad (\text{Width}+1.5) + (2\times(\text{Height}+0.5)) \\
    \text{Height of Fold:} & \quad \text{Height} + 0.5
    \end{align*} |
| 4 rows |       |        | \begin{align*}
    \text{Length of Board:} & \quad (\text{Length}+0.5) + (2\times(\text{Height}+0.5)) \\
    \text{Width of Board:} & \quad (\text{Width}+2) + (2\times(\text{Height}+0.5)) \\
    \text{Height of Fold:} & \quad \text{Height} + 0.5
    \end{align*} |
This table shows how to calculate a box with 1-4 rows that will hold 3x5 bags.

<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Board Dims</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 row of 3x5s</td>
<td>10</td>
<td>3</td>
<td>6.25</td>
<td>Length of Board: 24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Width of Board: 17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Height of Fold: 6.75</td>
</tr>
<tr>
<td>2 rows (of 3x5’s</td>
<td>10</td>
<td>6</td>
<td>6.75</td>
<td>Length of Board: 24</td>
</tr>
<tr>
<td>side by side)</td>
<td></td>
<td></td>
<td></td>
<td>Width of Board: 20.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Height of Fold: 6.75</td>
</tr>
<tr>
<td>3 rows (of 3x5’s</td>
<td>10</td>
<td>9</td>
<td>6.75</td>
<td>Length of Board: 24</td>
</tr>
<tr>
<td>side by side)</td>
<td></td>
<td></td>
<td></td>
<td>Width of Board: 24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Height of Fold: 6.75</td>
</tr>
<tr>
<td>4 rows (of 3x5’s</td>
<td>10</td>
<td>12</td>
<td>6.75</td>
<td>Length of Board: 24</td>
</tr>
<tr>
<td>side by side)</td>
<td></td>
<td></td>
<td></td>
<td>Width of Board: 27.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Height of Fold: 6.75</td>
</tr>
</tbody>
</table>

- Be sure that each box height is greater than the length of the bags placed in the box, to ensure nothing sticks out of the box when being placed in cabinets or drawers. Typically, an extra inch allows enough room. For example, for a box that holds 3x5 bags, which have a total length of 5.75 inches, the box would have a height of 6.75 inches.

- Cut the blue board using a Fletcher 3000 or a box cutter according to your calculated measurements. Assemble the box.
- Line the bottom of the box with a layer of Polyethylene foam to provide a cushion.
- Using a measuring template, place the box dividers into the box, ensuring they are evenly spaced. (6)
- Either using a premade box or a custom box, put the filled bags into the box so that the nests align to keep the objects in place.
  - Example of using a measuring template to place dividers in a box holding 3x5 bags (7)
Labels

- In Excel, create labels for each box using the font of Arial, Bold, size 30. For smaller boxes, size 17 may also be used.

![Excel labels](image)

- Print these labels. Using an adhesive, affix the labels to the box according to your department’s standards.

![Box with labels](image)
Divider labels

- Create a blue board separation insert to identify the objects that are in front of the separator in each row. Write a list of the object numbers in pencil on the blue board to begin. When you are finished with the box, create a paper label with the numbers in Excel and affix it to the insert with adhesive. The label will have a font of Arial, Bold, size 30 or 17.