



# Conserve O Gram

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## Internal Supports for Buckskin Clothing Storage

Buckskin clothing created and worn by Native Americans is often heavily adorned with beadwork, jingles, furs, quillwork, and other attached elements. Due to the weight of these adornments and the nature of buckskin, buckskin clothing should be stored flat. Folded or hanging storage does not provide adequate support.

To prevent sharp creasing when buckskin clothing is stored flat, the interior needs adequate support. This *Conserve O Gram* provides guidance on how to create two kinds of customized internal supports or padded forms for flat storage of buckskin clothing using polyester batting, polyethylene foam and Tyvek® sheeting. The NPS Conservation Laboratory, Intermountain Region, Museum Services Program developed these supports during a storage upgrade project for collections at Grand Teton National Park.

### Materials

- Soft Tyvek® (Grade 14-M [soft structure]); can substitute unbleached, washed cotton muslin)
  - Polyester batting (sheet [½" loft]) and fiber fill; can substitute cotton)
  - Cotton twill tape (unbleached 100% cotton)
  - Polyethylene foam plank (Ethafoam 200, 2" thickness)
  - Measuring tape
  - Scissors
- Ceramic knife
  - Bone folder
  - Cotton sewing thread
  - Sewing machine or needle

### Form-Fitted Pillow Support

This support is used for buckskin leggings. It consists of two individual support pieces; each constructed using Tyvek® sheeting that is formed and then stuffed with polyester batting. These supports fill the internal spaces to prevent heavy creasing when the item is stored flat. Each legging receives its own support that supplies loft without filling all the empty spaces.

### Construction Steps

1. Measure the length of one legging. Add at least 2" extra inches to your measurement at the widest end, and at least 1 inch to the narrow end. This allows enough room for folding and closure. See Figure 1 and 2. Some leggings have fringes and most have an angled high thigh area. Include these in the measurements.



Figure 1. Assemble two support pieces of batting and sheeting.

2. Measure the width of the flat legging at four different points: top of thigh, knee, calf, and ankle.
3. Place two pieces of Tyvek® together with the smooth sides facing each other. Transfer the length and width measurements of the legging to the Tyvek®, creating an outline of the desired form. Cut the Tyvek® along this outline.
4. Keep the two cut pieces together with the smooth sides facing. When the support is finished, the smooth sides will be on the exterior of the pillow, minimizing friction against the buckskin.
5. Sew the two pieces together along three sides, leaving the edge along the thigh area open. Leave up to a ½" seam allowance. Stitch by hand or sewing machine.



Figure 2. Sew the two sheeting pieces together.

6. Turn the stitched Tyvek® form inside out. The smooth sides will now be on the exterior and the seams concealed inside the form. Partially fill the pillow with polyester batting, then insert the pillow into the legging and continue to fill it until the pillow reaches its desired form. Fill the pillow just enough to prevent heavy creasing; it should not be so full that it is difficult to remove

the pillow from the legging.

7. Allow the form of the pillow to extend approximately ¾ inch beyond the thigh edge of the legging. When finished, close this edge, folding the Tyvek® inside and sewing the final seam. See Figure 3.



Figure 3. Insert completed pillow into legging.

8. Repeat steps 1-7 for the second legging.

### *Padded Rigid Support*

This type of support is used for heavily decorated buckskin shirts. It consists of three individual pieces, one for the chest, and two for the arms. Each support is made from polyethylene foam wrapped with polyester batting and Tyvek®. See Figure 4. The polyethylene foam provides more rigidity than supports using only polyester and Tyvek®.

### *Construction Steps*

1. Measure the length and width of the chest area, and of each sleeve. Include any fringe work or attached elements that may extend from each cuff or waist.
2. Determine the thickness needed for the finished supports by measuring the interior spaces of the shirt. Make the polyethylene foam plank interior 1 inch thinner than the desired final thickness. For example, if a 3 inch support is needed, start with a 2 inch thick piece of foam. The polyester batting

adds another inch to the thickness.

3. Cut three pieces of polyethylene foam plank to fit the measurements taken in steps 1 and 2; one for the chest and one for each arm. Use a ceramic knife or another cutting tool.
4. Trim any sharp or rough edges on the polyethylene foam pieces. Round and curve the edges to prevent creasing and to promote easy insertion and removal of the support pieces.
5. Lay the pieces of polyethylene foam plank flat on a surface (the same way they will be laying when inside the buckskin shirt). On three of the vertical sides of each piece, cut three parallel 1 inch deep slits the entire length of each side, roughly equidistant from each other. These cuts will provide spaces for the batting and Tyvek® to be tucked into and held in place.
6. Cut a piece of polyester batting sheet large enough to be fully wrapped around the polyethylene foam plank. Tuck one end of the polyester batting sheet into the first slit along one side. Wrap the batting around the foam plank and tuck the other end into the third slit on the same side. Repeat on the remaining two sides. The center slit is reserved for the Tyvek®. Make sure the batting is tightly secured in the slits. See Figure 5.
7. For each polyethylene foam plank, measure and cut a section of Tyvek® sheeting large enough to fully wrap around the form and add 1 extra inch on all sides. Follow the same instructions as outlined in step 6 to tuck the Tyvek® into the center slits on all three sides. See Figure 5.

8. Insert completed support piece into the sleeve, see Figure 6 and 7 and repeat for the remaining sleeve and chest pieces.



Figure 4. Measure and cut rigid foam, batting and sheeting.

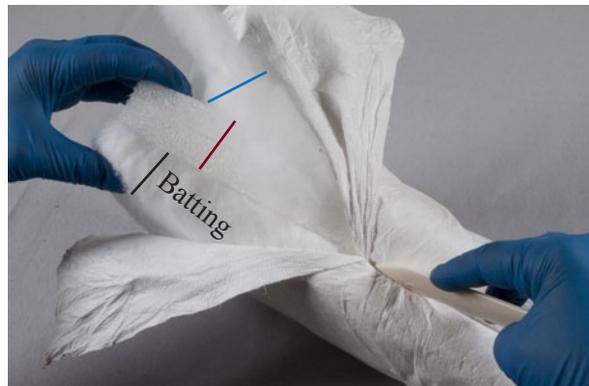


Figure 5. Tuck batting and sheeting into rigid foam with tool.



Figure 6. Tuck sheeting into slits on all three sides.



Figure 7. Insert completed support into sleeve.

These supports can be easily adapted for other types or styles of clothing. For more information on the care of textiles and/or leather and skin objects, see NPS *Museum Handbook*, Part I, Appendix K: Care of Textile Objects and Appendix S: Curatorial Care of Objects Made from Leather and Skin Products.

### *Selected Sources*

Ceramic knife: kitchen stores or online.

Bone folder, cotton twill tape, unbleached 100% cotton: Gaylord Bros. <[www.gaylord.com](http://www.gaylord.com)> or University Products <[www.university-products.com](http://www.university-products.com)>

Polyethylene foam plank 2" thick, Ethafoam 200. Sealed Air Specialty Materials. <[www.sealedairspecialtymaterials.com/na/en/products/ethafoam.aspx](http://www.sealedairspecialtymaterials.com/na/en/products/ethafoam.aspx)> or University Products,

Polyester batting sheet, ½" loft; Gaylord Bros or available at sewing supply stores.

Polyester batting, fiber fill: Sewing supply stores.

Tyvek Grade 14-M (soft structure) Spun-bonded polyolefin fabric made by DuPont. Suppliers: Talas, <[www.talasonline.com](http://www.talasonline.com)> or Gaylord Bros.

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