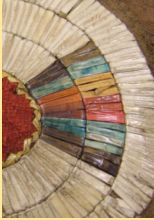


Conserving the shirts



Cleaning, stabilizing...and learning

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In museums, conservators are the people who care for the items in the collection, both physically and through preventive measures. As part of the practical work on objects Conservators prepare supports for fragile items, remove dust, and stabilize areas of damage while preserving evidence about how they have been used. Before the Blackfoot shirts can be taken to Alberta for study and exhibition, the conservation team at the Pitt Rivers Museum had a LOT of work to do!

Each shirt was examined and carefully assessed for problems such as broken quills, old repairs that might now be distorting and damaging the hide, broken attachments for hairlocks, condition of hide, and dirt. Although each shirt was then assigned to one conservator who would be responsible for doing all the work on that shirt, treatment proposals for each shirt were agreed as a team. In this way the treatments, such as the choice of adhesives, was the same for each shirt. The conservators, along with other colleagues at the Pitt Rivers Museum, also had guidance from Allan Pard (Piikani) on working with sacred objects, as the hairlock shirts are sacred to Blackfoot people.

Assessing the shirts



There are many broken quills on this shirt; it's very fragile.

Most of the shirts were covered in fine black soot, which spread onto clean surfaces every time they were moved or placed on a table. Soot like this comes from coal fires, which led us to wonder how the shirts had acquired this layer. The Pitt Rivers Museum was opened in 1884, and the shirts were transferred to the museum in 1893. The museum was then heated by boilers, which were in a different building from the objects, so the soot would not be from that part of their history. However, private homes in the nineteenth century were often heated by open coal fires, and these do deposit a fine layer of soot around the house. We think this soot on the shirts must come from the period when they were owned by Edward Hopkins.

Another clue comes from the tack holes where the shirts were tacked or nailed to the wall—not a method of display used nowadays by museums! We think that these holes might have been made by Mr Hopkins pinning the shirts up in his home to display them before he gave them to the Pitt Rivers Museum.

You can see the hole from the tack in the centre of the neck

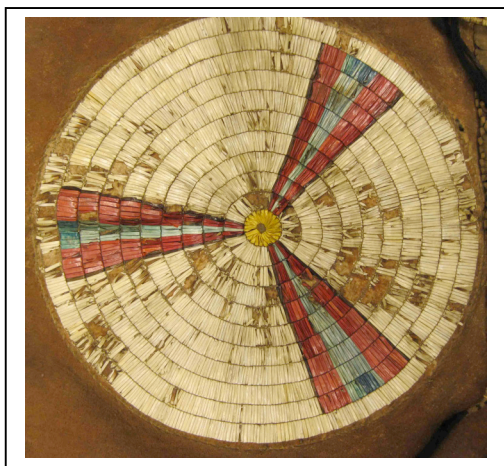


Conservators aim to preserve evidence on objects that shows how the objects have been used. We don't want to clean away the history of an object. For the shirts, though, other factors had to be considered. Coal dust is alkaline, and can damage hide and quills. The dust also made it unpleasant to handle the shirts, and we didn't want Blackfoot people who would be studying the shirts to think that we had allowed these important items to stay dirty. We needed to undo some of the old museum repairs to the hide that were now placing stress on the hide and damaging it. We also needed to stabilise the quills that were lifting so that they would not be further damaged by handling.

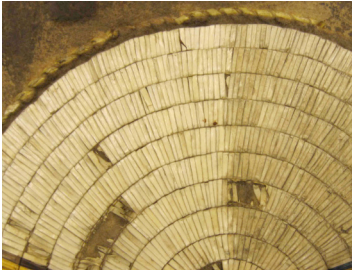
Before any treatments were started all the damage to each shirt was documented using photographs and written records. The documentation continued throughout the treatment process.

Cleaning the shirts

We began by using ‘smoke sponge’ –an inert vulcanised rubber—on the hides. By breathing on it to give it the slightest bit of moisture and then dabbing gently across the hide, alternating direction so as not to disturb the surface, slowly the soot and dirt came away. It took a long time and a lot of pieces of smoke sponge though!



Cleaning the quills and hairlocks



To clean the quills, we barely wetted cotton wool swabs with distilled water, and then rolled them over the quills, discarding the swabs as they became dirty.

We cleaned the hairlocks, which also had soot in them, by either using a barely damp cotton swab pushed through the hair to a blotter behind or by pulling a barely damp tissue through the hair from the top while supporting the hair in the binding with the other hand.

Stabilizing the broken quills



One of the most time consuming things we did was to stabilize 'popped' quills so they would not break away completely when the shirts were handled. Quills were gently eased back into position and held there with a tiny amount of adhesive. All the materials we use are conservation grade and reversible, so no permanent change is made to the objects we work on. Where quills needed to be stabilised and could not adhere to each other a thick synthetic material called Tyvek was coloured to match the surrounding quills before slipping below the secure adjacent quills to enable loose quills to be attached to this surface rather than the hide

Reattaching the hairlocks



Some of the hairlock attachments had become brittle and broken off, or were in danger of breaking. Where we knew their correct position, we bound the end of the hairlock with linen thread, passed the thread through the original hole in the hide and tied it off on the inside.

While documenting the shirts before treatment we became aware that on the shirt with painted war honours, more holes were originally made for hairlock attachments than there ever were hairlocks.

Stabilising the hide

Tears or holes in the hide were stabilised from the back by applying a synthetic polyester material called Reemay, which we colour matched to the hide using powdered pigments. The coloured material was then attached to a film of heat-activated adhesive using a heated spatula. Small pieces

of the tissue could then be cut to size and adhered to the reverse of the hide over holes and tears using the heated spatula to activate the adhesive film. Once the heat is removed and the adhesive cools the support is very strong.

This part of the treatment requires the most patience and skill, as a slip with the heated spatula would cause damage to the hide.

How long did it all take?

Some of the shirts have received conservation help at various times during their lives in the museum, but preparing them to travel to Canada for the workshops and exhibitions has been many hundreds of hours. The two shirts needing the most help took over 100 hours each.

The conservators have designed a special crate to transport all five shirts from the UK to Canada and with careful packing we think they will travel safely. However, parts of the shirts are still fragile and there is a chance of minor damage during the workshops and through the handling of the shirts to put them on display. A conservator from the UK will travel with the objects to help others understand the safest way to handle the shirts and show them which areas are fragile.