DRESSED FOR SUCCESS

HIDE TANNING

AND THE

USE OF BUCKSKIN

AMONG THE MOUNTAINEERS

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ROCKY MOUNTAIN OUTFIT
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Perhaps no image is more romantic than that of the buckskin-clad Mountaineer, fringe hanging gaily from every seam.[1] Is that an accurate portrayal? Looking through the ledgers leaves no doubt that cloth was a commonly available and used material for clothing in the Rocky Mountain fur trade, but accounts describing the use of buckskin in the historical record are also quite common.

> *In fact, the whole appearance of our party is sufficiently primitive; many of the men are dressed entirely in deerskins, without a single article of civilized manufacture about them.*
> *– John Kirk Townsend*[2]

Buckskin allowed both white and red man alike to survive in the harsh conditions of the American West. It cut the wind, offered protection from the sun, mosquitos, brush, and anything else that nature could throw its way. It was more durable and outlasted cloth. Perhaps most importantly it was readily available away from civilization.

> *…buckskin clothes, which are certainly more serviceable against sun and mosquitoes when one is on horseback.*
> *– Rudolph F. Kurz*[3]

ORIGIN OF THE TERM

The term "braintanning" is used today to describe buckskin manufactured in the old way. However that term did not come into use until the early 1970s. It was coined by Larry Belitz when he published his small booklet, *Step-by-step Brain Tanning the Sioux Way*. He chose it as a way to emphasize native tanning prior to the reservation days when brain substitutes such as lard and soap became more commonly used.[4]

The terms most frequently used historically were dressed, Indian dressed, or simply buckskin. The reason being that it is not technically considered a real tanning process. This is not only a modern day opinion[5,6], but one that was had back then as well.

> *The Indians, on the other hand, tan the hides and use them partly for their own dwelling and clothing, partly in barter with the whites. Tanning is the business of the Indian women solely, and is carried on as follows: They first stretch the fresh hide with pegs on the ground, clean it with sharp stones of all flesh, fat and skinny parts, and finally rub in fresh buffalo brains. This latter gives the hides great pliancy, but is not a real tanning process. The hides thus prepared can therefore stand little moisture, and the hair falls out easily. – F.A.Wislizenus[7]*

Sidebar: Hides or skins?

Two terms commonly used when referring to buckskin are ***hides*** and ***skins***. Is there a difference? According to leather industry terminology, hides refer to older or larger animals such as cattle, buffalo, horses, and elk. Skins are from younger or smaller animals such as deer, sheep, goats, and calves.[8,9] However this does not appear to be consistently used in period sources as sometimes you will see "buffalo skin" or "antelope hide."

OBTAINING BUCKSKIN

Buckskin could be obtained in the West a number of ways. Surely the most economical method would have been to trade with the Indians. Finely dressed skins could often be had for a few trinkets and foofaraw, such as beads and awls.

> *We obtained a large number of Elk Deer and Sheep skins from them of the finest quality and three large neatly dressed Panther Skins in return for awls axes kettles tobacco ammunition etc. – Osborne Russell[10]*

> *A small business is also carried on with the Snake and Utah Indians, living in the neighborhood of this establishment. The common articles of dealing are horses, with beaver, otter, deer, sheep, and elk skins, in barter for ammunition, fire-arms, knives, tobacco, beads, awls, &c. -- The Utahs and Snakes afford some of the largest and best finished sheep and deer skins I ever beheld — a single skin sometimes being amply sufficient for common sized pantaloons. These skins are dressed so neatly as frequently to attain a snowy whiteness, and possess the softness of velvet. -- They may be purchased for the trifling consideration of eight or ten charges of ammunition each, or two or three awls, or any other thing of proportional value. Skins are very abundant in these parts, as the natives, owing to the scarcity of buffalo, subsist entirely upon small game, which is found in immense quantities. This trade is quite profitable. The articles procured so cheaply, when taken to Santa Fe and the neighboring towns, find a ready cash market at prices ranging from one to two dollars each. – Rufus Sage[11]*

In addition to trading with the Indians, there are accounts of selling skins at the various trading posts, such as Fort Hall.[12,13]

The last resort would be for them to produce it themselves. How did they know how to dress skins? Did they learn it from the Natives, or was it a common skill on the frontier? During my research I have seen no specific mention of learning from the Indians. Many of the references talk of just stopping over for a short time to dress some skins, leading me to believe it was a common occurrence and widely known skill.

EARLY ACCOUNTS

Starting from the early expeditions into the Rocky Mountains we have the Lewis and Clark expedition of 1804-1806. According to Lewis, all men were "*leather dressers and tailors.*"[14] All throughout the Lewis and Clark expedition the men were employed with dressing skins to repair and replace clothing and moccasins. This was especially true during the winter at Fort Clatsop where they spent much time preparing elk hides to make moccasins for the return trip. During that winter they were able to make 358 pairs of moccasins in addition to shirts, overalls, capes, and more dressed leather.[15]

Following on the heels of the Lewis and Clark expedition were the Astorians in 1810-1812. There were two overland parties associated with the Astorians. The first was the Westward journey led by William Price Hunt in 1810. The second was led by Robert Stuart and was a party of 7 men heading Eastward in 1812. Their journey was faced with many challenges which forced them on foot for most of the way back to St Louis. This hardship required them to dress skins to mend and replace clothing similar to Lewis and Clark.[16]

RENDEZVOUS ERA

From there we jump to the hey-days of the rendezvous period and look at the men that were part of the Rocky Mountain Fur Trade. Here we have accounts from three men: James Ohio Pattie, Zenas Leonard, and George Frederick Ruxton.

James Ohio Pattie left with 3 others from Newport, Missouri on June 20th, 1824 to trade with the Indians on the Upper Missouri. After learning they needed a license to do so, they changed their plans to instead go to New Mexico with Sylvester Pratte. In early August of 1824, while waiting to meet with Pratte, Pattie recorded:

> *At this encampment, on the banks of the Platte, we remained four days, during which time we killed some antelopes and deer, and dressed their skins to make us moccasins.*[17]

He later recorded another instance on April 10th, 1826. This time while near the confluence of the Little Colorado River and Colorado River in the Grand Canyon.

> *We likewise killed plenty of elk, and dressed their skins for clothing.*[18]

Further north we have Zenas Leonard who was with a party trapping along the Laramie River in present day Wyoming. In November 1831, they were preparing for winter quarters west of the Laramie Mountains. They had finished building cabins out of cottonwood logs when he wrote:

> *We also killed Deer, Bighorn Sheep, Elk, Antelope, &c., and dressed the hides to make moccasins.*[19]

Then on November 22nd, 1833 he was with Captain Joe Walker in California, about 30 miles south of Monterey.

> *The most of our company had become nearly bare-footed for want of moccasins, as we had wore out everything of the kind in travelling from the Rocky mountains – and, as winter was approaching, and no one knowing what kind of reception we would meet with among the Spaniards, it was advised that we should tarry here and provide ourselves with an abundant winter supply of shoes. Accordingly, our hunters were despatched to scour these hills for the purpose of getting hides to make moccasins, &c., when we would be at leisure. In the evening the hunters all returned to camp, with the tongues of 93 deer and some of the hides, and also of some wild cattle, which are likewise very numerous.*[20]

George Frederick Ruxton was a young Englishman who travelled through the Far West in the early 1840s leaving an entertaining account of his adventures. While in the valley of the Soda, Beer, and Brimstone springs in present day Idaho he describes the party of men splitting into twos to go trapping. Old Bill Williams stayed back to guard camp. After being attacked by Blackfeet, a trapper named Markhead came racing back to camp to find Bill Williams working a deer skin.

> *He drew no bit until he reined up at the camp-fire, where he found Bill [Williams] quietly dressing a deer-skin.* [21]

As you can see from these accounts there are multiple sources, from different years and places, mentioning the dressing of skins. Of particular interest is that Pattie was dressing skins within weeks of starting out from Missouri. That should leave no question that it was a commonly known and practiced skill.

HOW WAS IT DONE?

The general process of producing buckskin is to first remove the hair and grain layer of the hide or skin, then apply animal brains, stretch and work until soft, and then finally smoke it. There are as many ways to accomplish this as there are tanners. But how was it done historically by these men in the West?

More often than not the descriptions left are generic and vague. The most complete was recorded by Rufus Sage. Sage traveled west in 1841 and spent three years among the mountain men and Indians. He left detailed accounts of the geography, customs, and ways of life that he encountered.

> *The usual mode of dressing skins, prevalent in this country among both Indians and whites, is very simple in its details and is easily practised.*
>
> *It consists in removing all the fleshy particles from the pelt, and divesting it of a thin viscid substance upon the exterior, known as the "grain;" then, after permitting it to dry, it is thoroughly soaked in a liquid decoction formed from the brains of the animal and water, when it is stoutly rubbed with the hands in order to open its pores and admit the mollient properties of the fluid, —this done, the task is completed by alternate rubbings and distensions until it is completely dry and soft.*
>
> *In this manner a skin may be dressed in a very short time, and, on application of smoke, will not become hardened from any subsequent contact with water.*
>
> ...
>
> *Near this [winter quarters] is his "graining block," planted aslope, for the ease of the operative in preparing his skins for the finishing process in the art of dressing; and not far removed is a stout frame, contrived from four pieces of timber, so tied together as to leave a square of sufficient dimensions for the required purpose, in which, perchance, a skin is stretched to its fullest extension, and the hardy mountaineer is busily engaged in rubbing it with a rough stone or "scraper," to fit it for the manufacture of clothing.*[22]

If we read into this a bit, there are a few notable things that stand out:

The first is the mention of there being a "graining block", or beam, planted into the ground and a viscid (wet) substance is removed. This clearly indicates that the skins were wet-scraped as opposed to dry-scraped. As the name suggested, wet-scraped hides were prepared after soaking for a while and the hair and grain layer scraped off. Dry-scraping the hide is laced into a frame and dried then scraped using a sharpened scraper. The painting, *Sioux Indian Encampment*, by Karl Bodmer depicts a possibility of how this beam may have looked.

Next, the skin is soaked in a mixture of brains and water, rather than rubbing them directly onto the skin. It is manipulated while soaking for better penetration of the brain mixture.

The description of a "stout frame" made of poles and a stone scraper may initially be confused with the dry-scraping technique. However, since it has already been mentioned that a beam was used to grain the hide, the frame is most likely being used stretch and soften the skin. Perhaps the stone is being used in the stretching process or maybe it is a pumice stone used to buff up the hide and further soften it.[2324]

And finally, it is mentioned that the skin is smoked. This is an important step in the process for creating skins that stay soft after repeated wettings.

It is especially interesting to note that Rufus Sage appeared to be dressing skins and selling them at Fort Lancaster (aka Fort Lupton) where there was a ready market. This is an account of white-man tanning hides not only for himself, but also for trade.[25]

Sidebar: A tall tale

James Beckwourth is a mountain man perhaps most famous for his tall tales. In one of these, an Indian squaw requested of him to kill a deer or antelope and to bring her back the skin and brains so she could dress it. In return he would be given a pair of fine moccasins. While out hunting through the sage brush for antelope he spotted a lone horseman, and assuming it to be an Indian, he made up his mind to shoot him and bring the squaw his brains instead, figuring she would know no difference. He concealed himself in the sage with his rifle ready until the horseman was within range. The rider stopped to adjust something on his saddle at which time Beckwourth recognized him to be General Ashley. Beckwourth later told Ashley of the narrow escape he had made and the General was surprised to have been mistaken for an Indian.[26]

MAKING CLOTHING

While clothing could be obtained when leaving the settlements, it would inevitably wear out and need to be repaired or replaced. Some forts, such as Fort Hall, had tailors on hand which could be hired to do the work[27]. Indian women labor could also be used cheaply. When there were no other options they would have to do it for themselves.

> *While the pantaloons were being cut out by the enterprising John Smith and sewed by his squaw with awl and sinew, I wore a breechcloth, a la mode Cheyenne, manufactured of a leg of my old pants.*
> *– Lewis Garrard*[28]

One of the most frequently mentioned reasons for dressing skins was to make new moccasins. This makes sense as it is the clothing item that wears out the most frequently. Again, Rufus Sage left us with a description of how it was done, describing the manufacture of side-seam moccasins. Of the styles of moccasins known to be worn in the West, the side-seam is the easiest style to make.

> *The process of shoe-making with him is reduced to its most simple form. He merely takes two pieces of buffalo (or any other suitable) skin, each being a little longer and wider than his foot, particularly towards the heel; these he folds separately, and lays them together parallel with the turned edges; then, rounding and trimming the sides, to render them foot-shaped, with an awl and the sinew of buffalo or other animal, or small strips of thin deer-skin, ("whang,") he sews the vamps from end to end, —then after cutting a tongue-like appendage in the upper side, midway from heel to toe, and stitching together the posterior parts, his task is done.*[29]

Often the references left by the Mountaineers refer to mending or making clothing. This leaves a lot unanswered. Besides moccasins, what type of clothing were they making? Shirts, pants, leggings, &c.? How crude or tailored did they look? This is, unfortunately, something that we may never know. This note by Lewis Garrard may leave a clue that if you made your own moccasins, it showed.

> *On his feet were thick moccasins, and to judge from the cut, of his own fashioning.*
> *– Lewis Garrard*[30]

Anyone that has made something out of buckskin knows that one of the hardest things to do is make the initial cuts. Buckskin is a valuable material as there is a lot of labor involved in manufacturing it. This trepidation was also felt historically as we can see from this quote by John Palliser.

> *After a good deal of hard work, we shot a black-tailed doe each; the meat was not very good, so we did not burden the horses with it, but brought the skins to camp. On the morrow I occupied myself in dressing them, with Boucharvilles assistance, and the following day finished and smoked them, and began to cut out. The celebrated Rout, of Portsmouth, who was once known*

> *to affirm that he passed sleepless nights over the cutting out of trousers, could not have taken greater pains than I did with mine; still I wasted the cabbage to such an extent, that before the completion of my work, I had to sacrifice another deer at the shrine of the Sartorian god.*[31]

Unfortunately most of us don't have the luxury of just running out and shooting another deer if we make a mistake.

CONCLUSION

The skins of deer, elk, antelope, and sheep are all mentioned frequently for use in making clothing or moccasins. Though they would use what they had readily available, a noted preference for mountain sheep is made by Osborne Russell[32], deer for trousers by Palliser[33], and antelope by Sage.[34] There are very few references to other ungulate species.

While moose hide makes excellent moccasins due to its thickness, I have not seen a reference to dressing moose skins in the context of the western United States. This is due to the fact that they were not common in the central Rocky Mountains at this time. How the ecosystem has changed since the fur trade is something to keep in mind. An example is that elk were once common on the prairie though now they most commonly inhabit the mountains.[35,36,37]

One thing that stands out from many of these references is that when the process of dressing skins is actually described, it seems to be most commonly during the winter (L&C, Astorians, Zenas Leonard, and Rufus Sage). This makes sense in the fact that "winter quarters" was a more of a sedentary time where there would be more time to work on repairing and replacing gear. These men lived a nomadic lifestyle, especially during the hunt for beaver, and may not have had the time to stop and dress skins at other times unless in desperate need.

The Mountaineers faced many hard times and challenges during their travels and life in the mountains. They were able to adapt and overcome many obstacles, making do with what they had available to them. Being able to dress skins to repair or replace clothing was just one of the many things that a well-rounded Mountaineer would be able to do.

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[1] Rufus Sage, Rocky Mountain Life, p.38
[2] John K. Townsend, Narrative of a Journey across the Rocky Mountains to the Columbia River, p.40
[3] Rudolph F. Kurz, On the Upper Missouri: The Journal of Rudolph Frederich Kurz 1851-1852, p.73
[4] Larry Belitz, Personal correspondence, February 2013
[5] A. B. Farnham, Home Tanning and Leather Making Guide, pp.62,111
[6] Jim Riggs, Blue Mountain Buckskin, pp.6,59-60
[7] F. A. .Wislizenus, A Journey to the Rocky Mountains in 1839, pp.52-53
[8] A. B. Farnham, Home Tanning and Leather Making Guide, p.17
[9] Monte Burch, The Ultimate Guide to Skinning and Tanning, p.3
[10] Osborne Russell, Journal of a Trapper, p.61
[11] Rufus Sage, Rocky Mountain Life, p.232
[12] Clay Landry, Book of Buckskinning VIII: The History & Trader Ledgers of Fort Hall, p.185
[13] Lewis Garrard, Wah-to-Yah and the Taos Trail, pp.114-115
[14] Meriwether Lewis, Journal entry on July 29, 1805
[15] William Clark, Journal entry on March 12, 1806
[16] Robert Stuart, The Discovery of the Oregon Trail: Robert Stuart's Narratives of His Overland Trip Eastward from Astoria in 1812-13, pp.138,161,191,193
[17] James Ohio Pattie, The Personal Narrative of James O. Pattie, p.41
[18] Ibid., p.138
[19] Zenas Leonard, Narrative of the Adventures of Zenas Leonard, p.17
[20] Ibid., p.113
[21] George F. Ruxton, Life in the Far West, p.120
[22] Rufus Sage, Rocky Mountain Life, p.348
[23] Matt Richards, Deerskins into Buckskins, pp.108-122
[24] Rudolph F. Kurz, On the Upper Missouri: The Journal of Rudolph Frederich Kurz 1851-1852, pp.195-196
[25] Rufus Sage, Rocky Mountain Life, p.347
[26] James P. Beckwourth, The Life and Adventures of James P. Beckwourth, pp.70-71
[27] Clay Landry, Book of Buckskinning VIII: The History & Trader Ledgers of Fort Hall, p.189
[28] Lewis Garrard, Wah-to-Yah and the Taos Trail, pp.114-115
[29] Rufus Sage, Rocky Mountain Life, p.39
[30] Lewis Garrard, Wah-to-Yah and the Taos Trail, p.121
[31] John Palliser, Solitary Rambles and Adventures of a Hunter in the Prairies, pp.232-234
[32] Osborne Russell, Journal of a Trapper, p.206
[33] John Palliser, Solitary Rambles and Adventures of a Hunter in the Prairies, pp.232-234
[34] Rufus Sage, Rocky Mountain Life, p.290

[35] Charles Kay, Aboriginal Overkill and the Biogeography of Moose in Western North America
[36] Charles Kay, Are ecosystems structured from the top-down or bottom-up: a new look at an old debate
[37] Elers Koch, Big Game in Montana from Early Historical Accounts

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