

Brain Tanning

The Pre-smoke Method

~2008~

Greetings Tanners,

Contrary to what some people might lead you to believe, the ancient art of brain tanning hides is a never ending learning experience. If you stop experimenting, you stop learning. Our method has changed over the years since our first article was published on this Native Tech site.

We have searched for easier ways of tanning that require fewer steps or less work. After tanning hides, trial and error for nearly 25 years, we find that the way we are tanning now is easier than any way we have tanned in the past and would like to share our combined knowledge with you to make your hide tanning an easier, and a consistently more successful endeavor.

For those of you who have tanned for years, some of the information will be redundant, but we are hoping you will also learn new techniques from us. Even if you use different methods, there might be something in our information that you can apply to your chosen method to make tanning easier.

For you first time tanners, we hope that our method will teach you what you need to know to begin a long and enjoyable tanning hobby or business.

We are sure you first time tanners will be somewhat overwhelmed by the amount of information, but as you learn, and do more hides, the method will not seem so complicated. So do not give up. It is sort of like making bread or anything else that requires certain steps be taken to produce a good end result. At first it is difficult, but eventually you don't even need to use a recipe.

We are not saying that we never come across a bugger of a hide that we have problems with, but 99% of the hides we do, both deer and elk, come out soft and extremely beadable through out the hide.

We are not saying that our way is the only way to tan a hide, because there are many methods to choose from. NO matter which method you use, it will require patience and practice.

We will soon have a DVD, with accompanying field guide available for purchase. We hope to have these available early this summer. For more information, please contact us via email or phone. If you would link our upcoming site with as many sources as possible so that we might sell or DVDs, it would be immensely appreciated. If you contact us before the DVD is available, we will keep your information and notify you with it is available. Sorry for the delay and any inconvenience we might cause.

Something to Remember Right Off:

If you are going to try our method of tanning, begin with a fresh hide that has had no other chemicals applied to it. Don't take a hide that you have failed to finish, using harsh chemicals and apply our method to the same hide, expecting it to get the results in each step of our method that we describe and eventually get a nice soft hide. Start fresh.

Getting Started:

We purchase our hides from a fur buyer each year, but you can also get them from local hunters or wild game processors. Most hunters are only concerned with removing the hide from the carcass and not preserving the hide in good shape, so inspect the hides you plan to use.

We always recommend that first time tanners begin with a medium size doe hide. The reason is that doe are smaller and in most cases thinner than a buck. Choose hides that have no bad odor and have not began to decompose. Always begin with as fresh a hide as possible. We have successfully used salted hides that have been a year old and we have also used dried hides. Choose hides that have few or no holes, or what is called scores, which are caused by knife cuts during skinning. A pulled hide is ideal, it has next to no meat on it, eliminating the need to flesh the hide.

If you choose to take hides from individual hunters, some states require that the hunter's hunting license information be recorded. Different states have different rules. Here in Montana, because we sell our hides and do not keep all of them for our own personal use, we are required to have a taxidermy license. There is a poaching problem in our area due to the remoteness, so the Fish&Game guys are out for blood where ever they can find it. They have visited us several times to check our hides and how we are keeping our books. After years of seeing that we are legal, they pretty much leave us alone.

We are always amazed at how many e-mails we receive from people who say that they were given an elk hide, and they want to learn to brain tan it. Be kind to yourselves, start easy with deer, get very good at tanning them before you tackle an elk. When we tan elk we prefer a cow elk of about three years old or calves. We have yet to tackle a bull elk and would prefer not to.

Storing Hides

Since we purchase so many hides per year, we salt ours with livestock salt and pile them up on wooden pallets so they are off the ground. If you choose to store your hides in this manner, be sure to flesh them well, salt the entire hide generously to the very edges. Layer them so that they are hair to flesh, rather than flesh to flesh. Placing them on a pallet allows air circulation all around the hide. If you place the hides directly on the ground, they tend to build up heat and rot, that has been our experience.

We use to hang our hides, flesh up, and let them dry, over tipi poles which had been hung horizontally from trees. The winter birds loved them, but a dried hide takes longer to soak and

is just not as easy to work with. We prefer a fresh hide or one that has been salted or frozen.

Freezing your hide is an option as well as drying it. For years we rented large freezer lockers at our local meat market, rolled our hides up with the hair still on, stuffed them in construction weight garbage bags and stored them that way. Ideally if you want to keep your hides frozen, pick up a small chest freezer. Sometimes you can find used ones for a reasonable price, but even new small chest freezers are not very expensive. It keeps the deer hair off the ice cream container, if you know what I mean! Our freezer usually holds more hides and carcasses than food. If you de-hair your hides before freezing them, you can store many hides in a small freezer..

Don't wrap your fleshed and de-haired hide up in plastic and store it in the refrigerator for very long or just let it lay around for days because the hide will begin to rot. Unless you skinned the deer, or know who did and how long it has sat around before you obtained it, it could possibly be only one day away from starting to decompose. If you have started a hide, and do not have time to finish it, it can be stored frozen during most steps of our method.

Tools & Supplies:

Keep in mind that we use modern supplies, if you choose to do your hides the old way, using traditional tools, then just make adjustments. There are no reasons you can not use traditional tools using this method. The start up cost for tanning hides is pretty minimal, most supplies can be purchased locally and some tools can be made at home. You might find you already have most of the supplies at hand.

You will need: (This is what we use)

- * One 35 or 55 gallon plastic containers for soaking the hides
- * Two small kitchen size garbage containers for preparing and keeping the brain solution and soaking hides
- *Fleshing beam~ constructed from wood and PVC pipe
- * Assorted tools, a scraper for fleshing and de-hairing, paddle type tools for working the hides, a heavy spoon, blender, coarse pumice for removing excess membrane when hide is finished.
- * Frames built from 2x4s
- *Parachute cord,150 feet, cut into 5' length, with the ends **NOT** melted to keep from fraying
- *Utility knife
- *Construction size garbage bags for hauling away debris as well as for cutting the end out of, stepping through, and tying it around the waist for a disposable apron of sorts

*Long rubber gloves

*High-top rubber boots

*Disinfectant soap for washing up, hydrogen peroxide for any scrapes or cuts, Joe has had blood poison twice.

*Punky wood, and/or wood chips

*Metal band attached to post, tree, something unmovable

*Brains ~ We use to purchase cow brains but since they are not longer sold due to mad cow disease, we purchase pork brains. If you have the brains from the animal, even better.

Our fleshing beam is built so that the center hole of the beam is just above the navel. But position it for your own comfort. Ours can be taken apart easily by lifting the pipe and board it is slid onto, out of the notch cut into the top of the large support beam that stands vertical, to allow for moving it inside our shop when the weather is disagreeable our outside when sunny. It has 6" PVC pipe that is slid onto a board with

a space cut in it lengthwise with a chain saw. The advantage of using PVC rather than a wooden log, is that the PVC does not get wet and nicked up, resulting in your scraper catching on those nicks and causing a cut in the hide.

We build our frames so that the ends overlap enough to support the frames from sitting on the ground. This makes it possible to lace around the frame even the bottom edge closest to the ground. We have nails in the frame randomly along the outer edges to keep the cord from slipping as we turn the frame to work on the hide. We use to use large fence staples nailed to the inside edge of the frame in which we laced the cord, but found this new way much faster and easier for both putting the hide on the frame as well as taking it off.

STEP ONE~ Fleshing the Hide

If your hide is fresh, you might not have to soak it before fleshing it. If the meat on the hide seems somewhat dry and stuck to the hide, soak it over night. When the hide is in the large garbage pail, it will tend to float to the surface, place a heavy rock or cinderblock on it to keep the entire hide submerged. Next day, hang the hide a few minutes to allow it to drip the excess water. Lay the hide on the beam hair side down, letting the neck of the hide hang down over the end of the beam nearest yourself, so as you lean against the beam, your body weight holds the hide in place as you flesh. At this point you are only interested in removing the meat and fat from the hide and some of the membrane that comes off with those.

Soak the hide overnight in preparation for de-hairing it.

STEP TWO~ De-hairing the Hide

Lay the hide on the beam, with the neck nearest you so you can lean against it to hold it in place. The neck area is the most difficult to de-hair, so start a few inches down. You can turn the hide around and de-hair the neck scraping against the lay of the hair later. Your scraper should not be as sharp. We actually dull our scraper a bit to prevent cutting the hide. It should be sharp enough to separate the epidermis from the hide. Sometimes you just have to experiment to find the right sharpness. Our scraping tool has a beveled edge as most scraping tools have. Joe turns the tool around so that the beveled edge is away from him. He says that the tool actually scrapes easier for him that way. The blade can be held straight up, in a more comfortable position, rather than at an angle which can get tiresome on the wrists.

You will be able to tell if the hide is ready to de-hair by inspecting the hide when you have scraped a bit.

What you are going to inspect is the brownish layer, the epidermis, that the hair grows out of. It should be soft, and thickened, if so, as you scrape the brownish epidermis off the hide, the hair comes off with it.

It is sometimes difficult to start the scraping, but after a few scrapes the job at hand should become easier. If it continues to be extremely difficult, put the hide back in the barrel to soak another day. Joe prefers to use the hair as a guide as to where the hide has been scraped, so he would rather the hair not slip off on its own .

Work down the center of the hide as far as you can comfortably reach, then slide the hide to one side or another working from the edge to the middle or the opposite, and then the other side, move the hide up towards you and repeat until you finish all the way down the hide. You will apply less pressure with the tool as you near the edges of the hide because they are thinner and more subject to tearing. This is just how we do it, you might find you prefer another way. Now, you can turn the hide around and work towards the edge of the neck, applying as much pressure as necessary to remove the neck hair.

After you have de-haired the hide, it will appear to be discolored and yellowish. You can inspect the edges of the hide and cut off any parts that are very thin, or have holes. Cutting these undesirable parts off now will save you time and aggravation later.

This is the time to also cut your lacing holes. We cut ours by laying the hide on an old picnic table. Rather than trying to pull the utility knife blade across the hide to cut the lacing hole, poke the point of the blade into the hide and pull up on the hide gently to cause the blade to slice the hide.

Joe and I differ on how far in the lacing holes should be cut and the length. I like my lacing holes about an inch from the edge, he prefers his closer. I like my holes to be about $\frac{3}{4}$ " long, he prefers shorter. (of course my way is the best, haha) You can trim your hide more at this point. I like my hides to be rather uniform on the edges, Joe isn't so picky. Make your holes about three or four inches apart so the hide is well supported. Always put a lacing hole on the parts of the hide that stick out farther, and at corners.

Sew up any holes at this point. . We almost never get a hide with no holes. It surprises us how many requests we get for perfect hides with no holes. I don't know how city folk think deer are reduced to possession, jump out of a tree and strangle them? Or wait by the watering hole and

drown them?

Anyway, we use artificial sinew, the kind that easily splits into four strands, and a glovers needle, that has sort of an awl point with three sides. Make sure the glovers needle has a large enough eye, so that when the artificial sinew is doubled, the eye makes a large enough hole in the hide that the sinew can easily pass through the hole. Not too many things worse than pulling on the needle to get the sinew to come through, and because your hands are wet, your fingers slide down the needle and across the three sharp sides, resulting in small slices on your fingers, making them very sore. Peroxide time!!! I also use a thimble. All can be purchased at a leather supply store.

We use a blanket stitch which holds well while the hide is being worked. Just make sure to put a large knot on the end of the sinew, to prevent the knot from sliding through the wet hide as it is being worked and stretched.

STEP THREE ~ Pre-Braining the Hide

Prepare a warm brain solution by mixing one package of brains, about 1 pound, and four gallons of very warm water. You do not want the solution to be so warm you can not hold your hand in it, otherwise it will slow cook the hid, this has been our experience. If the hide has slow cooked, it will fall apart or be very weak.

Our pre-braining solution is always made from the old smoky brain solution we use to brain the hides in before they are softened. We have found that if the solution is smoky it seems to work better. So, since this is your first pre-brain solution and you have no smoky solution to use, take the time to smoke an old towel for an hour or two, put in the brain solution, let soak then wring out into solution container. You *probably* won't have to mess with that again, I say *probably*.

We use a blender to blend the brains with a small amount of water, dump that mixture into the small kitchen garbage pail size container, followed by the very warm water. Mix thoroughly. Take the fleshed/de-haired hide which is yellowish and discolored and feeling like wet leather, and begin to dip it into the warm solution.

As you dip it in and out of the solution and swish it around, you will notice that the color and texture begins to change. The hide begins to lighten and turn a dull whitish and also begins to feel **very slimy** and smooth, very unlike the hide that you put into the solution only moments before. After a wetting the hide thoroughly, we sit in front of the container and work the hide with our hands, just feeling all the parts of the hide to make sure it is as equally slimy all over and not feeling dryish any where. If you do feel a spot that still feels not slimy, just pull gently on that part a bit and soon it will relax and absorb as much of the solution as the rest of the hide. We leave the hide in the pre-brain solution overnight. Be sure to use a heavy stick to keep the entire hide submerged as it will sometimes float to the surface, causing a dry spot.

STEP FOUR~ Hanging the Hide to Dry

Not too long ago we attempted to omit this step and just take the hide out of the pre-brain solution and pre-stretch it, it didn't work. We had to work harder as a result of our attempted "short-cut".

So, take the slimy, whitish hide out of the solution and hang it **SIDEWAYS** from a clothes line. Do not drape it over the line so that it doubles. This was my discovery several years ago, and we found it makes a difference. We use to just throw the hide over the line and let it hang so that the neck and hips were together and closest to the ground, not anymore.

This is just one small difference that makes the hide work a bit on itself. Use lots of clothes pins so that there are not large "U's" in the hide, you want the hide to be pinned pretty uniformly across the edge. As you look at the hide, the neck and the hips should be on each horizontal end, and the sides of the hide be on the top and bottom. When the hide is hung in this manner, the weight of the wet hide, actually begins to open up the fibers that run from neck to butt. The longer the hide hangs there while wet, the more the fibers will open. I went as far as wiring a metal fence post to the bottom edge of the hide to add additional weight, thinking it would cause the fibers to open even more, but it did not seem to make any difference in the pre-stretching step, just more work at this time. As the hide dries, it again becomes yellowish, discolored, rather hard and stiff. It usually takes a day to dry depending on weather of course.

When it is dry, put the hide into a container of plain, cold water and let it soak overnight. You might have to check on it occasionally and keep pushing it down as it softens, again keep it submerged with the end of a heavy stick.

A warning, if the sun is out and weather hot, do not allow the hide to stay on the line very long after it has dried, because the heat from the sun will of bake the hide, resulting in a hide more difficult to work later.

STEP FIVE~ Pre-stretching the Hide ~ *The Most Important Step*

When you take the hide out of the cold water it soaked in all night, it will feel sort of thick and rubbery. If the day is warm and windy, you will need to work fast, it helps to move the hide out of the wind and sun if you can.

You don't want the hide to dry very fast as the best pre-stretching is performed when the hide is wet.

We now lace the hide on the frame differently for pre-stretching than how we lace it on the frame for the final softening phase.

This is the step that makes all the difference! This is a technique that I discovered one day by accident I guess. We have always said to pre-stretch the hide thoroughly, until it is whitish on both sides, and that is still the case. But it is how the hide is worked on the frame that is different from how we use to do it.

We work the pre-stretch hide from side to side only.

Since working the hide from side to side, sometimes causes the hide to stretch as much as a foot or more make sure you are using a frame large enough to hold the hide, plus have room for 10 or so inches of lacing. Make sure the hide is as centered on the frame as best you can.

First lace the sides of the hide, lace both side edges, pulling the lacing snugly, taking out any slack, then lace across the butt and neck, not pulling on the hide tight, just enough to take out the slack.

We have found that it is best to lace in the same direction all the time. For example, lace over the top of the frame, come in the lacing hole on the hide through the back of the hide, then again lace from front of frame to back. I hope this does not sound confusing. If you keep your lacings all going in the same direction, it will be easier to tighten the hide as you work it.

Now that you have the hide laced on the frame you will want to work the hide as much as possible while it is still wet. Use your paddle like tool, and work the hide from **side to side only**. I very rarely ever work a hide from neck to butt anymore when I am pre-stretching. In my opinion when a hide is stretched and worked from butt to neck, it tightens the fibers, because they seem to run in that direction and you just pull them together, and as the hide dries the fibers stick together causing the hide to be dense in the center of the hide along the back. As you work the hide from side to side you will see that it gets very baggy and loose. You will want to immediately tighten the hide as much as possible. Don't just snug it up, but really crank on it to keep that work saved that you just did. Turn the frame up side down and work the other edge, side to side, not butt to neck. As it slackens, tighten the lacing again and again, as tight as you can.

This is why it is best to trim the hide's sides, after de-hairing, so it is not extremely thin and to put your lacing holes in a bit from the edge. You may still experience lacing holes breaking, just re-cut them and continue on, choose strong lacing holes to tighten the laces from.

When you tighten your lacing, don't grab onto one end of the lacing, pull on it and expect the rest of that length of lacing to tighten. Take time to tighten from both ends of the section of lacing cord. Your tightening will be more uniform, and your lacing holes will tend to break less.

We have a couple different hide tools, both are made from metal on the ends, neither are the least bit sharp. One has a wide metal blade that I like to use on the hide when it is wet. It covers more of the hide and can gently be used near the edges and even over the lacing holes. The narrow bladed tool, is easier for me to use on the hide once it is whitened out but is still not dry at the neck, hips and butt. I can apply more pressure with the narrow tool, this allows me to really press harder and separate those fibers. Always tighten the hide when ever possible. Don't wait until you have turned the frame several times, when you work the hide, and it relaxes and

gets saggy, tighten the hide as much as possible **before turning** the frame to work in the other direction.

The edges will dry before the rest of the hide, so you are going to want to work the edges soon after putting the hide on the frame and working side to side a couple of times. The edges will not begin to whiten out until they begin to dry some, but work the edges while they are still wet too. Work them occasionally so you whiten them before they become dry and papery.

I like to use a heavy spoon and work the edge of the hide by standing along the outside of the frame, placing one hand behind the hide and holding the spoon against the hide in front, and drawing the spoon towards me. I work the hide a few inches in and also over and around the lacing holes. For me, it is easier to use something small like a spoon to work the edges and lacing holes than to use a larger tool. As the hide begins to dry, you can tell the edges you have not worked well enough because they will begin to turn a dark color, sort of like rawhide. You will want to work those areas with the spoon before they dry completely, I call it “pulling the brown out” because that’s how it looks as the hide whitens when you pull on it.

If your edges are allowed to become dry, papery and brittle, you will not be able to stretch the center of the hide as much without breaking the lacing holes. This is why it is so important to really get the hide stretched out as much as possible while the entire hide is still wet.

You will want to work the hair side really well, because it doesn’t whiten out as easily as the flesh side does. Turn the frame often so that you are working the side to side direction on both the flesh and hair side of the hide. Always tighten the hide as much as possible when it becomes even the least bit loose, again, pull hard to save the work you have done, rather than let it shrink back in the least.

While I do not work the hide with the tool from neck to butt, I will often take up looseness from the neck or butt edge, that I can not take up from the sides. Tighten the hide along the neck and butt opens those thick areas up more, but only work it from side to side. You will notice as you work along the neck edge, the fibers open nicely. Since the neck and butt are thicker, in most cases the lacing holes are stronger, so you can really apply pressure to those areas.

Within the first 15 or 20 minutes after having the hide laced on the frame, you should have worked both sides of the hide from side to side a couple or more times, tightening the lacings each time before turning the frame, you should have worked the edges and over the lacing holes a couple of times.

Once the hide seems like it is not going to stretch any more and is whitish, you don’t have to work it as often. However don’t wait too long in-between working the hide, as if the hide dries before it is properly stretched, it may be difficult to soften in those spots. When you are pre-stretching, make sure to pay close attention to the neck, along the center of the hide along the back and the hips as the hide is the thickest on those parts. I know I keep saying that, but it is

only because it is so crucial that these areas are worked well and fibers opened.

I have found that to prevent a lot of lacing holes from breaking, I work the hide from the center of the hide towards the edge, applying less pressure as I near the lower edge, it helps. If you begin your pressing-downward motion from the upper edge of the hide, a lot of pressure is applied on one or two lacing holes, and they tend to break. If your pressing-downward motion begins from near the middle of the hide, then the pressure is absorbed by most all the lacing holes. I hope I am describing this as clearly as it is in my head.

Keep in mind that you want the hide to be whitish all over, front and back. Any rawhide spots that are not whitish but yellow like rawhide, have not been pre-stretched enough.

Eventually the hide will stop stretching to the point where you will be able to tighten it using the laces.

Now is the time to concentrate on working the neck, hips and center of the back as even though the hide might be white, these areas are not dry yet. Really work them, side to side, to open the fibers. If you can take the edge of your tool, press it against the hide, and it leaves an indentation, the hide is still wet there. Apply a lot of pressure on these areas to really open them up. Often the damp parts of the hide feel cooler than the dry parts. When the hide is totally dry, it should feel very stiff and hard and sounding hard when tapped on. NO indentation should remain or even be able to be indented.

You will notice the funny shape of the hide. It is very short and wide, having been stretched from side to side. This shape is ok for now, it is what you want. You can take the hide off the frame now, and store it for as long as you wish in this pre-stretched stage as long as you keep it dry.

If you do not melt the ends of the parachute cord, they will easily and quickly unlace from the stiff hide, if you melt the ends to keep them from fraying, the glob of melted ends will catch on the dried lacing holes. The cord will fray some, but not a lot.

If you have pre-stretched the hide well, when you take it off the frame, it should droop over on its own, being somewhat flexible. If it is stiff and stands board straight, you didn't pre-stretch it well enough. It will not soften as easily as it would have. You can go ahead with the process, not knowing if the hide will soften easily, or re-soak it and pre-stretch it again. Once you get the hang of pre-stretching properly, you will do it correctly every time and believe it or not, it will seem an easy task. If you followed my directions closely, working the hide from side to side only, tightening up the slack in the hide very, very tightly, really working the neck, hips and back, then it should be sufficiently pre-stretched.

If your hide is pre-stretched really well, the softening will be very easy.

Phew, that was long, eh?

STEP SIX ~ Smoking the hide

It is very important to take the hide from the smoker and immediately brain it in a warm solution. So about 10 minutes before you are finished smoking the hide, make your solution. If

you let the hide sit

and don't put it directly in the brain solution, it will harden up somewhat and the fibers will not absorb the

brain solution as well. We have found that if the hide does not go right into the solution, rather than the hide feeling like soft wet fabric when it comes out of the brain solution, it will feel dense and rubbery and will not soften well, if at all.

Joe has always felt that cedar works best for smoking hides, but perhaps what you have in your area works well too. We purchase cedar chips from our local gardening supply store. Purchase wood chips only. Do not purchase wood bark. The chips are actual small square wafers of wood. The wood is what has the oils in it, not the bark. Don't let some salesman convince you to buy what you don't need.

We pile the cedar chips on top of cottonwood punkywood. The punkywood that you find in a fallen tree that has dry rotted on the inside, helps keep the cedar chips smoldering. We have also used charcoal briquettes in the past. You can use anything, as long as it doesn't easily catch fire and burn your hides. We dampen the chips with a water mister to inhibit flare ups.

Hang your hides in the smoker so they do not touch if smoking more than one. Smoke your hide for several hours, checking the wood often to make sure flare-ups do not occur and that the smoker is still going and does not need more wood. You can take a piece of metal and make sort of a tent to fit over your chip container to inhibit flare ups from reaching your hides. We have found that hides smoke better if the inside of the smoker is not cold. If it is below freezing here, it takes longer for the hides to smoke and do not smoke as well as when it is warmer. Just the opposite is true unfortunately, if it is 120 degrees or higher in your smoker, it can have a bad effect on the hides as well by baking them. It is not necessary that the hide be a dark color. Remove the hide from the smoker and put it immediately into the awaiting warm brain solution.

Ideally, the hide should just seem to melt into the solution, not resisting at all. Swish the hide around and dunk it in and out to make sure the hide is not bunched up anywhere. At this point the hide should feel like a soft wet thick towel. Use that heavy stick to stand in the bucket on top of the hide to make sure it stays submerged.

We have had lot of different styles of smokers. You can build yours out of wood, or tarps. The only things you want to be sure of it that the smoker is not so large that it requires lots of smoke. Make the smoker tall enough so that the hides hanging in the smoker have sufficient room to not be very close to the smoke source. Make the smoker wide enough to allow for two or more hides to hang without touching one another. The smoker should have a small amount of air circulation, preferably small holes near the top of the smoker, this allows heat to escape and well as encourages the smoke to circulate around the hides.

One of our favorite smokers was made from sheets of plywood.

If you plan on smoking your hides when they are finished, beautiful results can be achieved by sewing the hides into a tube, and suspending the tubed hide above the smoke source, taking care that the smouldering wood does not flame-up and burn the hides you have worked so hard to complete.

STEP SEVEN ~ Working the hide on the band

The band is a long piece of metal, like you would find bound around lumber or large appliance boxes, we have also used old worn saw mill blades. If you're using a metal band with smooth edges, it helps to use tin snips and serrate the edges a bit. Don't cut the edge so it has sharp points as it can scratch and scar your hide. Make the band about four feet long, find something vertical to attach it to, for instance a tree, post you have put into the ground enough so it is firmly set, or the side of a building. Nail the top of the metal band so that it is about shoulder height, let it bow out about 8" and nail the bottom of the band about mid-shin height. The bow leaves enough room to easily place the hide behind it and have room to work the hide back and forth.

After the braining hide has soaked about an hour, move the hide bucket to the band and work the hide on the band in such a way that the solution that runs off the hide, runs back into the bucket. Hold the hide by its sides, and work back and forth across the band, moving up and down, repeating the motion. Pay close attention to the neck, hips and along the back. This step just assures that the fibers are open as much as possible to accept as much brain solution as possible.

No need to really pull hard on the hide if it feels like the soft, thick wet towel I described above. If there are parts that feel rubbery, you will need to work them on the band with more force to open those sections up as much as possible, if this happens, it is because the hide was not pre-stretched well enough. This step usually takes Joe about five minutes to do. When you have worked the hide on the band sufficiently, put it back in the solution, weigh it down with the stick to keep all parts submerged, and leave it overnight.

STEP EIGHT~ Softening the hide

Remove the hide from the solution, wring the hide as well as you can. Joe uses a pole and horizontal beam. You can also use a wringer like is on an old wringer washer, or you can even just roll the hide up in a thick towel and step back and forth across it to absorb excess moisture. I really like using the wringer. We purchased one that attaches to a horizontal board and it works real well. Again, if the day is sunny and windy, move the hide to the shade so it does not dry before you get it laced on and worked a few times or just don't wring it as well.

As I mentioned while discussing the pre-stretch step, the way you lace the hide on the frame to pre-stretch is different from how you will lace the hide on the frame now, to soften.

To lace the hide onto the frame, as always, try to center the hide so you have room to tighten it on all sides.

This time, lace the neck or butt edge first, (different from pre-stretching), pull the hide to give it its original length, or a bit more. Once you have the hide laced all the way across the butt and neck edges, **then** work down both sides.

I still work mostly from side to side, but occasionally work the hide and tighten it lengthwise, from neck to butt, this opens the fibers and makes the hide soft, and you retain the desired length of the hide. You don't want your finished hide to be short and wide like you do when you pre-stretch. Again, work the hide a lot when you first put it on and it is its wettest, as it stretches open more in that condition.

If you have pre-stretched properly, you will now see what I call the hide following the tool, as you press in and push down on the hide with your tool, you will see fibers all around the tool reacting and stretching towards the tool. The hide should feel very soft and flexible at this point.

Do not tighten the hide very tightly as you do when you pre-stretch. Just keep the hide tight enough so that it is not excessively baggy. It is not going to shrink any because it has been smoked. Keeping it snug just makes it easier to work the hide. Tighten all around the hide to insure a natural shape.

If you have a hide that is oddly shaped, sometimes you can remedy that problem by tightening up the laces more where the hide swerves inward. Pull those inward areas out as far as possible to be parallel with the edge of the rest of the hide as possible. It may not be exactly parallel but the shape will be better.

If you work the hide well in the beginning, you will not have to work it as often as the hide dries. Work the hide occasionally until it is dry. Usually damp spots feel cooler, or use the indentation test, if you take the end of your tool and push against the hide, and it leaves a mark, it is still damp there and needs to be worked until it is dry. When the hide is dry, you should be able to pull on it and it be springy anywhere on the hide.

We use the pumice stone at this point to remove any excess dried membrane from the flesh side. It makes for a neater appearance and is easier to work with.

I often hear people say that when they make an article out of leather, be it clothing or moccasins, the item stretches out after being worn for a while. The way we pre-stretch, there is hardly any stretching that happens after the hide is finished.

When a hide is mostly worked from the neck to the butt, which is the usual method, it may be soft, but the fibers that run from the neck to the butt dry close together and when you make an item of clothing, or moccasins, and wear them, the fibers open then, and the item loses its shape.

Leave the hide tightened up on the frame over night to assure flatness. The next day use your paddle on it just to relax it and then remove it from the frame. Store the hides in a dry place or smoke it again for color.

AFTER THOUGHTS:

* Brain solutions ~ We are able to do up to four to six hides with one pound of brains because of the double use of the brain solution. **Do not overextend the use of a brain solution without refreshing it with more brains. Eventually after using the same solution, it loses its effectiveness.**

I mentioned previously that you might not have to smoke a towel and put it in a newly prepared brain solution, the reason is, a smoked pre-stretched hide serves the same purpose. Because we tan our hides in a production line type process, we most always have a smoky solution to use. When we prepare a new brain solution, it is used for braining the hide that comes out of the smoker to be softened, soaking the smoked hide in the solution makes the solution smoky. After several hides have been brained with this solution, we then, instead of throwing it away, use it for the pre-braining step. Nothing goes to waste, unless the solution spoils.

We picked up an old refrigerator that we gutted and use to store the small garbage pail in during the warm months. We have found that pork brains spoil faster than cow brains, and can actually begin to spoil after only a few hours in the sun. Every once in a while we get lucky and get some cow or buffalo brains, but mostly we are forced to use pig brains as we can purchase them by the case.

* If you have a dried hide that you are going to tan, when you soak the hide to de-hair, it will take considerably longer to soften enough to even become flexible enough to hang over the beam. Once you have de-haired the hide, turn the hide sideways and use your fleshing tool to scrape the hide from side to side. During the time it sat drying out, the fibers that run from neck to butt, dried very tightly together, by scraping the hide sideways, and forcing the fibers to separate, the hide will be easier to do later during other steps. As always, when working your hides, work the neck, back and hips, always sideways, real well, for best results.

* Always take care to wash your hands well with an anti-bacterial soap after handling the hides. They are full of bacteria.