Live Sharps Rounds
from suet to completed cartridge

The original recipe info as found on the C-2nd Berdan's forum, Bill Skillman is the author (www.berdansharpshooters.com/usssbb/index.php)

With your bullet supply now completed we need to think of lubricating it. Mr. Smith (and I) use lamb suet that is rendered pure. This is best done when the wife is out of the house or on the backyard propane grill, as it can be very smelly endeavor. Put the suet into a pot and add enough water to cover the bottom of the pan. As the suet begins to melt, use a spoon to skim off the scum. Pour off the grease into a mason jar surrounded by warm water until the process is complete. For lubricating the bullets, I then take 2 tablespoons of suet and add 1 tablespoon (for about 10-15 bullets) of pure beeswax into a microwave safe cup and microwave them until melted. I set the bullets upright (on their base) on an aluminum foil covered cookie sheet in rows. I then apply a coat each bullet using a hobby paintbrush dipped into the melted lubricant. When the lubricant becomes congealed you pop the cup/lube into the microwave and reheat the solution back to a melted state. A second, and simpler, approach is to simply take the bullet and dip the tip into the lubricant and then remove. But be careful, the lubricant is hot and can coat your fingers just as well as the bullet if you are not vigilant! I then pop the cookie sheet/bullets into a convection oven set at 250 degrees for about 2-4 minutes until the lube becomes soft and begins to run off the bullets. Remove the tray and let cool, the bullets should have a nice sheen to them and are slippery to touch. You can return the leftover lubricant 'wafers' back to the mix and reuse them.

Preparing the lubricant and bullets

Step 1, Rendering the Suet

Theoretically, any fat will work, but suet is much denser than other fat, and lamb suet is what the recipe calls for. After being unable to locate lamb suet, I eventually used beef suet.

Step one is to render the suet, to get rid of the impurities. If you're doing this, definitely allow all day for it. I cut the suet into half inch cubes (it's easiest to cut when frozen), removing as much of the meat as possible. I cooked/rendered it in a crock pot (which requires much less attention than over a flame of any sort!) without added water. (If you Google "rendering suet", there can't be less than a dozen different "how to" – I chose crockpot w/o water as it appeared to be one of the easier methods.) The part that gets me is the smell - I find that it's both incredibly tasty and unpleasant at the same time...

At about pot plus seven hours. Most of the suet has converted to liquid, giving a good amount. Still getting some bubbling action, but considerably slower than previously. According to what I've read, when the bubbles stop, the cooking process is done.

Pot plus eight hours and a bit. Probably could have let it cook a little longer, but enough is enough.

Strained into a pot using a standard wire mesh strainer, then transferred to a jar for cooling/storage. Ended up with a salsa jar almost full to the rim. Jar is supposedly 15.5 oz, but since they aren't as full when you buy them, figure it's about 16 oz of rendered suet (I neglected to weigh the suet before

beginning). Have some very small floaters. If I'd used cheesecloth for the straining (as was recommended), I'm sure they wouldn't have gotten through.

The jar is currently in the 'fridge cooling.

The fried bits of fat are supposedly excellent eating. Yeah, well, I'm not that adventurous given that I like my steaks very lean (and mostly raw, according to some...). They will likely end up in the stray cat's dinners over the next couple days, so we'll let you know their opinion. Well, Trin just tried them and said that "I can't believe I'm about to say this, but they're kinda good". There was also no offensive smell at any point of the process.

Step 2, mixing the suet and beeswax

Using a double boiler set up of a jar inside a pot of hot water on the stove, I first melted the beeswax (reminder – melted wax is highly flammable). Once the wax melted, I began adding the rendered suet. Roughly the ratio followed the recommended 2:1 suet to wax – solid suet does not scoop easily or well... As a reminder, use some sort of measuring spoon to "dry measure" the suet – do NOT float it in water in a measuring cup as water in hot wax can cause a violent reaction... Stirring was done periodically with a wooden dowel.

Step 3, coating and baking the bullets

The bullets I use are BU0903 Cast Sharps Bullets from Dixie Gun Works.

When ready to coat the bullets, scrape some of the lube out of the jar and nuke it in a small glass bowl until it becomes liquid. (As my lube had just been mixed, I kept it liquid in the double boiler during the painting process.)

I set the bullets upright (on their base) on an aluminum foil covered cookie sheet in rows (each row was added as I completed lubing the prior row). I then applied a coat of lube to each bullet using an automotive chip brush dipped into the melted lubricant. Be gentle or you will knock the bullet over, possibly causing a domino effect...

Don't worry about painting the entire bullet. When the lubricant becomes congealed you can pop the cup/lube into the microwave and reheat the solution back to a melted state. Occasionally the brush had to be scraped and/or left in the warm lube to soften it back up.

Note: I did not use this method. A second, and simpler, approach is to simply take the bullet and dip the tip into the lubricant and then remove. But be careful, the lubricant is hot and can coat your fingers just as well as the bullet if you are not vigilant!

I then put the cookie sheet/bullets into the oven set at 250 degrees for about 2-4 minutes until the lube became soft and began to run off the bullets. Remove the tray and let cool, the bullets should have a nice sheen to them and are slightly slippery to touch. You can return the leftover lubricant 'wafers' back to the mix and reuse them. The leftover lube does not necessarily come off the foil easily, but with some persistence you can recover most of the excess.

Partway through "painting"...

A completed cookie sheet ready to bake...

And the "baked bullets". Note that the closest three are .58 minie balls, rather than Sharps bullets. The lube flowed smoothly down and into the rings as well as smoothly coating the bullet surfaces.

Making the rounds

I use a dowel from a Dixie Gun Works kit (KA0700 Sharps Combustible Cartridge Kit) to roll the tubes on. The dowel has a "handle", which I ground down to the same diameter as the rest of the dowel. My intent was to make the early-war clip tail cartridges, which are filled from the back. If you intend to make the late-war fold tail cartridges, do not grind the handle off.

Originally I used the nitrated paper that came with the kit, but after some experimentation (and advice from an individual who hunts with his Sharps carbine), I found that phone book pages work perfectly well.

Cut the paper into 2' by 4" rectangles. A paper cutter makes this job much easier and neater than cutting by hand.

Lay the sheet on your mandrel, on a good firm surface. (I usually have a sheet of paper under it, but for photo contrast I did not here). Roll it tightly and using a glue stick, roll it as you would a cigarette.

Note, I'm using the .54 mandrel that came in the Dixie Gun Works kit, however I ground the wider hand hold down to the same diameter as the mandrel. I found the larger handhold made the rolling process too difficult.

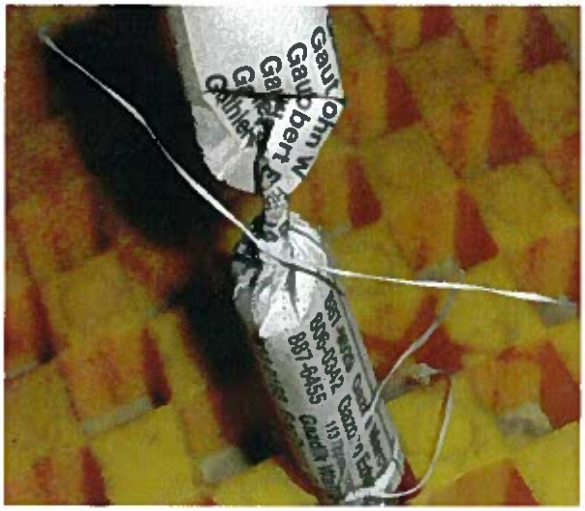
Using a smaller diameter rod, push the mandrel out. Take care not to crush the tube.

Using a Q-tip, apply white glue to the top half inch (or so) of the tube and insert the bullet. Before the glue sets up, tie the tube to the base of the bullet. I use waxed dental floss and a standard square knot for this.

With some practice, you'll be able to get the tie around the base relatively easily.
At this point, I set the bullet-tube aside to dry, while I continue producing more of the same. I'll let them dry at least overnight before moving on to the next step. This isn't really necessary, as the tie will keep the tube anchored, but I prefer to let the glue set up...

The next step is to add the powder load. I use 90 grain of FFg, however your individual rifle may need more or less powder to adequately expose the tail with the bullet seated in the chamber.

I find that using a small funnel makes the filling process easier.



Twist the tail the same direction as the seam (the same as you would a blank round) and tie it tight. Again, I'm using waxed dental floss and a square knot.

Trim the floss close to both knots and you're ready to head to the range!