Alp's rind-washing treatise

A good while back, a few of you requested that I make a thread on the topic of traditional washing, how you go about it, your goals, etc. so that we could all have an asy reference point to refer back to when needed. Along with a few other things I've been asked for (I promised another member a drawing of a curd stirring tool that I still have not done, I still intend to, just this is a busy time) this got pushed aside. Now I have a few moments to sit don and put this all together.

What I present here is the understanding of washed rinds in the Swiss style. Note that nearly all German Swiss cheeses are washed rinds, as are a good deal of the French Swiss cheeses. Aside from a few cheeses mainly from the Jura and Canton Freiburg, nearly all Swiss cheeses fal into the family of recooked cheeses and would be qualified as Hard or semi-hard cheeses.

The basic wash types seen in Switzerland (I use this, because it is what I know. Hopefully it applies just as well to other European cheeses) are salt rubbed, salt water (weaker than brine strength generally) washed, alcohol washed, and herb-rubbed. All of these techniques arise out of the basic desire to create a cheeses surface that will not have mold growth, and perhaps more specifically out of a typically Swiss desire to have everything turn out perfectly every time.

First we need to start out with the principles behind washing.
Why do we wash a cheese?

The idea of a washed rind is to create a cheese surface that will not allow any mold, yeast, or pathogens to grow on its surface. By washing the outside of a cheese, we contribute to a series of chemical changes that over a period of weeks transform the rind into a protective shell that helps to preserve the inside of the wheel and protect it from harm of any sort.
You could liken the process of washing to that of putting on a coat. By adding this outer layer, we allow the cheese to stand up to a variety of conditions that it would not be able to if we left it naked.

So again, the principle here is to wrap the cheese in a protective coating.
Some people do this with a foreign substance, namely wax, or accomplish a similar thing with oil. But what we want here is to turn the cheese itself into a rind.

To do this, we rely on bacteria, namely b. linens, either natural to the environment around us or introduced from some outside source via culture powders, etc. These little bugs will consume the cheese and break down its solids to produce a sort of slimy goo. In German, this is called *Schmier*. We want to form this smear, and wipe it around and keep it growing. If done properly, a good smear will cover a mulitude of evil ranging from minor rind flaws to inconsistent rh.

now lets look into how.

We will start of with the simplest form of the washed rind, the salt water wash.

To do this, we need to wash the cheese with a solution of salt and water slightly less concentrated than what we would generally call brine. Remember that the salt will build up on the cheese over time.

The basic rules of washing apply here that apply to nearly all forms of washing. Here are the guidelines I use:

1: Wash 1 side of the cheese every day, flipping the cheese over each time so that the newly washed side is

facing up, open to the air.
2: Wash the shelf where the cheese sits every time you wash and flip the cheese.
3: Always keep the cheese **wet** and do not allow it to dry off to the point where it is **damp**. Mold will not grow on a wet surface, it can't adhere when there is excess moisture. Mold prefers a lightly damp surface.
4: Use the same wash solution as long as you can get away with it. If you do this, you are actually culturing your own b. linens right there in the solution.
5: Do this every day for the first 10 days after the cheese comes out of the brine (if you brined it)

Now a few notes. Some people wash it every other day. But I see that generally those who do wash the entire cheese when they do so. So it comes out the same with my system, any given side of a cheese is washed every other day.

Also, my cheeses are aged and stored in a large room. They have ample opportunity to acquire wild bacteria for rind formation during this time. Many of you age your cheese in small containers in a refrigerator, where they have very limited access to fresh air. This may require you take extra measures to breed wild b. linens or even purchase cultured bacteria to begin the cycle (just mix a small qty of the powder with your wash water before the first washing).
Small container aging, as I see it, also gives mold more opportunities to invade. You might need to be more cautious if you do things this way.

Now lets go into what you should expect to happen.

The first goal is to attain a Schmier. The best way to describe this is as slime. Depending at where your cheese is in the cycle relative to other cheeses, this may be harder or easier to achieve. If you are using fresh, relatively sterile brine and wash then you are starting off with a pretty blank slate, and it may take 2 or 3 days before you start seeing the slime. If you have mature wash and brine that has seen a few cheeses already, then you mgiht even have a significant smear with the second washing.

The first time you wash a cheese, it should just be like wiping a clean bit of cheese (because that's exactly what you are doing) it just gets wet, maybe a little tacky. But with each successive washing, the liquid you rub around should get slimier. If you aren't familiar with it, you may think it is disgusting and feel tempted to wipe it off, thinking it to be some foreign invader. But be assured, this is what you want.

This is a good time to dispel a common misconception. When we talk about washed rind cheeses, the idea comes to mind of kitchen cleansers sterilizing and wiping away all grease and grime, leaving behind a sparkling, shiny surface. This is certainly NOT what we are after. If anything, we are doing the opposite. We wash our cheeses, trying to get them as slimy and nasty as we can manage. The only time you remove anything is if you clearly have a runaway infection of mold, yeast, or some sort of pathogen. To accomplish this, I like for my wash solution to get slimy and nasty, and only consider replacing it if it clearly smells like poison. So ts more like getting out a bucket of grease and rubbing it all over your fine china, so that you can get that nice bacon flavor with everything you eat 

The more we wash the cheese, the slimier it gets. I use a 10 day guideline, and make my cheeses pretty slimy. Also during this time, the cheese should clearly change colors. It might be anywhere from a bright orange to deep red, with shades of golden yellow and warm brown in between. This all depends on what precise strain of b. linens has made its home on your cheese.

Once the smear has formed, the goal of washing is to spread it around, to keep it growing, and to keep it wet so that it can beat out aggressive molds.

Now I will add one thing here. If you don't understand what's going on here, skip this part as it will just add to

your hopeless confusion. We can make minor adjustments to our washing procedure to get a desired rind character. If we want a really stinky, slimy rind then we might add a lot of culture to the wash water, or if we want a very light rind like Swiss Emmentaler than we might replace our wash solution regularly to keep culturing to a minimum. It's all in what we want to end up with at the end. In general, you can assume that the slimier your rind gets during the first 10 days, the thicker, stronger, and more flavorful it will be when we want to eat it.
I would suggest that for a long term aged cheese (like 1 year or more) you should go for a very heavy smear.

Now lets change things around a little bit, and look at other techniques.

First a variation.
Sometimes, Swiss cheesemakers use dry salt instead of slat water. This is rubbed onto the cheese either one side per day or the whole cheese every other day just like the wash water. The end result will be very similar, aside from a couple of variations.
1. There is no water introduced. The salt will draw moisture out of the cheese itself. This will result in a thicker, harder rind. This will give a rind more typical of Swiss Emmentaler, which is usually salt rubbed.
2. There is no bacteria being cultured in the wash, only what may grow on the cheese. This will result in a very lightly flavored, lightly colored rind. Again, typical of Swiss Emmentaler.

As with all salt in cheesemaking, it is imperative that this be absolutely free of additives of any kind.

So the technique is to take a small amount of salt in your hand, and thoroughly rub it all over the cheese. You start this as soon as the cheese comes out of the brine, so it is still wet. Then the salt will continue to keep the surface wet as you rub it the following days. Keep the same schedule as for washing with solution. You can use bare hands to rub (which are covered with wild b. linens, by the way) or a brush.

Now lets go back to the washing solution. There are countless variation we can add here.

One of the goals in a washed rind cheese is to add a flavor note to the cheese. B linens certainly have a character of their own, but sometimes we like to help them along. To do this, we add something else to the brine. For the Swiss, this is usually wine, but any alcohol will work. Some eastern Swiss use hard cider, and the Germans use ale. This not only will add flavor, but also helps to fight off mold.

Personally I add a little bit of white wine to all of my washes. This will have a slight yellowing or browning affect. You can use red wine or fruit wines as well. One award winning cheese from my ancestral village is washed with red wine, and has a dark, almost black, rind as a result.

Another variation is to rub the rind with herbs. There are a number of Swiss cheeses that have interesting rinds, coated with a layer of herbs that over time will leach their flavor into the cheese.

There are a number of ways to do this, not all of which I am familiar with and a number of which are secret, but in generally I believe that such a rubbing of herbs should be done once the basic washing is completed and a mute rind has been formed.